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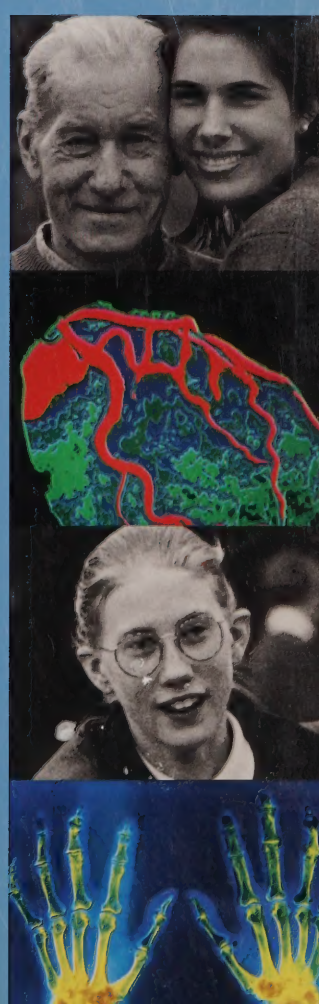
THE MASSACHUSETTS GENERAL HOSPITAL ■ ANNUAL REPORT 1994



The General Hospital

McLean Hospital

Spaulding Rehabilitation Hospital

The MGH Institute of Health Professions

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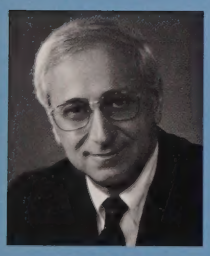
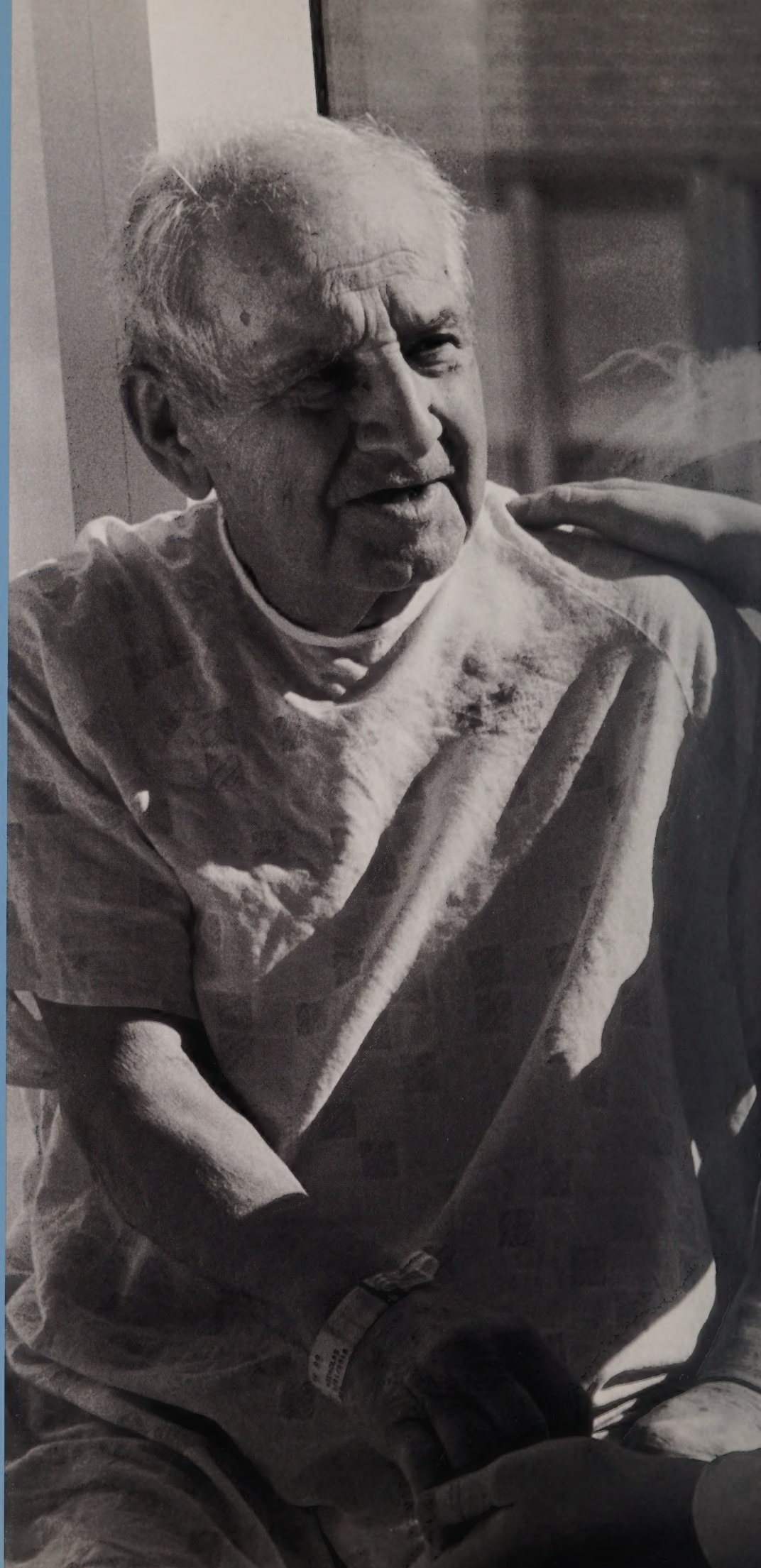


While the affiliates of The Massachusetts General Hospital — the General Hospital, McLean Hospital, Spaulding Rehabilitation Hospital and the MGH Institute of Health Professions — have in the past emphasized their separate identitites rather than their shared affinities, today they are again coming together with a new commitment and unity of purpose.

Samuel O. Thier, MD
President
The Massachusetts General Hospital



The General Hospital

Message from the Chief Executive Officer

We have a great deal to be proud of at the MGH. In a medical era characterized by financial pressures, the mission of the hospital remains unchanged from that which was first articulated more than 180 years ago: to provide the sick and injured with the best care possible and to help ensure that future generations receive even better care.

To remain true to this mission, the MGH is rethinking the way it does its work. The increase of managed care and the competitiveness of the health care environment have driven many changes. We have responded by working to treat our patients in a more cost-effective manner without sacrificing the quality and values that have made the MGH a world-renowned institution.

We believe that first-rate institutions like ours should play a key role in redefining health care for the country. This role is a critical one: to ensure a health care delivery system that is a model of top-quality, cost-effective care coupled with the best in teaching and research. As a founding member of Partners HealthCare System, Inc., along with Brigham and Women's Hospital, we are building a model network that embraces these standards.

The hospital's work force has always been the most critical element of our success, and, in turn, the MGH is committed to fostering the highest quality work opportunities for all employees. Wherever I go in the hospital — be it an inpatient unit, a research lab or a classroom — I see the employees of this institution dedicating themselves to the principle that patients come first.

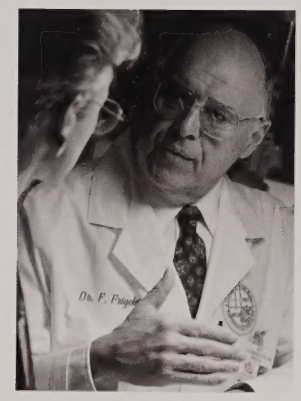
After all, our patients are the reason we are here. Placing the needs, convenience and comfort of patients ahead of all considerations is our most important guiding principle. This institution has never been more committed to those we serve. Our patients — and our community — will always come first.

Richard R. Crater
Chief Executive Officer
The General Hospital

MGH year in review

PATIENT CARE

MGH gives birth to new obstetrics unit



Fredric Frigoletto, MD, chief of Obstetrics

When Michaela Abby Mellen emerged into the light Nov. 2, she found herself in a spanking new hospital obstetrics service that had celebrated its official opening less than 24 hours earlier.

The MGH Mother and Child Center was conceived in the late 1980s and came into being despite the din of controversy and the uncertainty of the future. The fledgling service expects to deliver 2,000 babies per year, many of whom will be the children of women who received their care, prenatal and otherwise, at the MGH health centers in Charlestown, Chelsea and Revere. Another group the new center serves are mothers who have successfully conceived with the help of fertility treatments at the MGH's Vincent Memorial Obstetrics and Gynecology Service. Like patients from the MGH health centers, these mothers previously had to break their bond with the MGH to deliver their babies in the unfamiliar setting of another hospital.

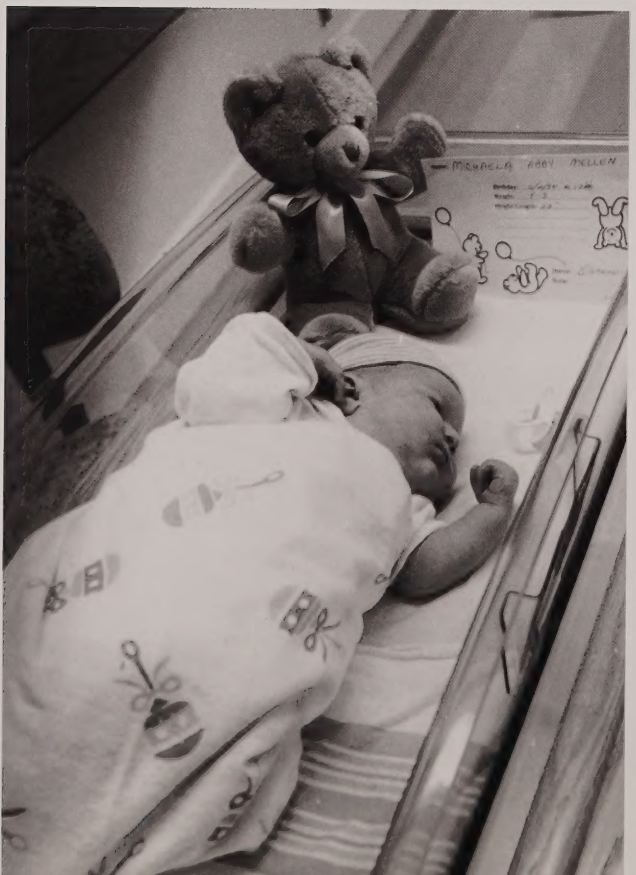
"Now with an on-site MGH obstetrics program," says Isaac Schiff, MD, chief of the Vincent Memorial Obstetrics and Gynecology Service at the MGH, "our new mothers — and their families — will enjoy the continuity of care they deserve."

That continuity of care is especially important when expectant mothers have chronic health problems, such as diabetes or heart disease. Such patients, as well as others facing a high-risk birthing experience, have the MGH's broad spectrum of state-of-the-art care available to them should they or their babies need it.

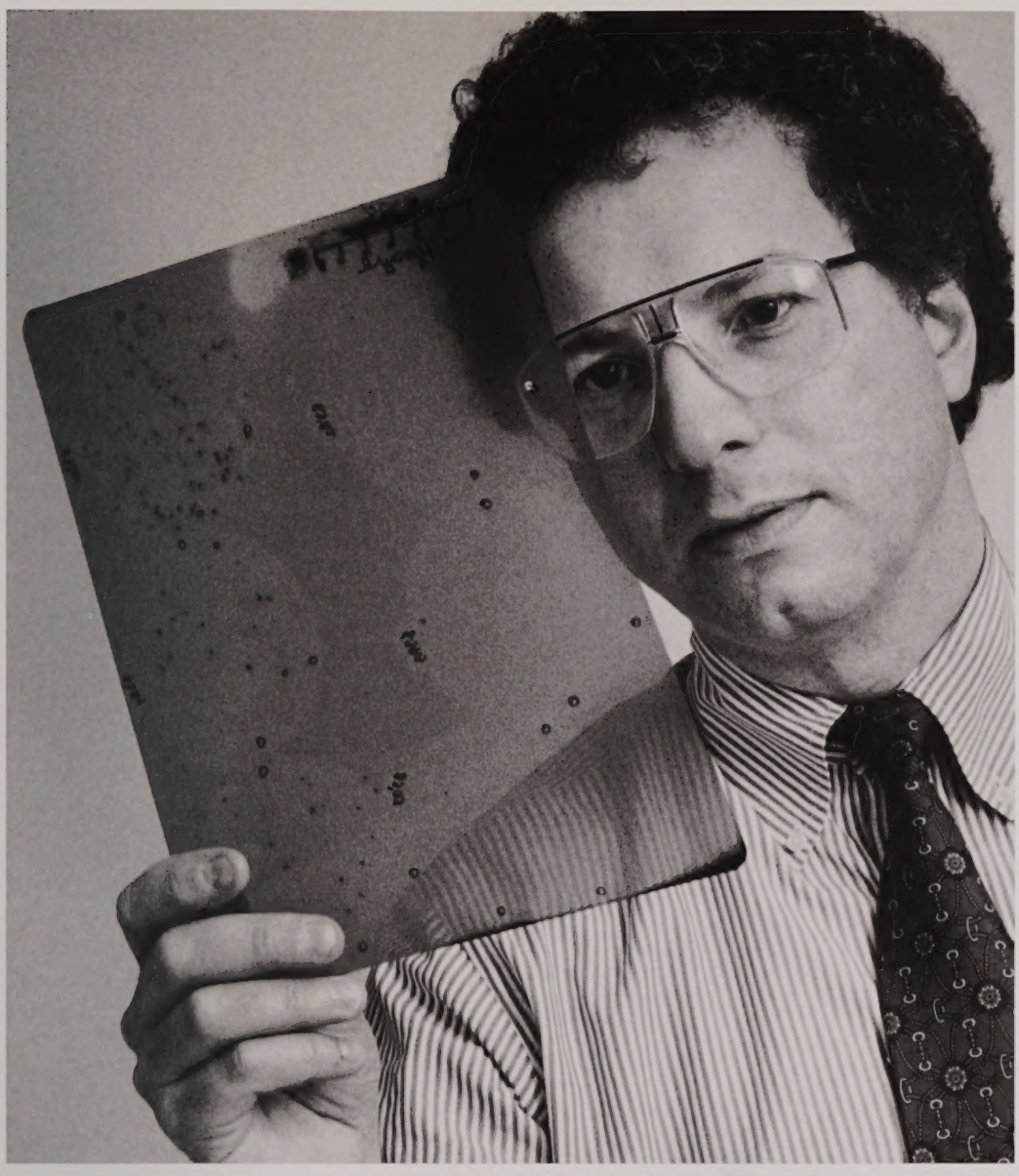
But the service is not focusing on high-risk deliveries. "While we will be able to provide the sophisticated care needed by high-risk patients," says Fredric Frigoletto, MD, chief of Obstetrics, "the majority of our patients will anticipate normal pregnancies. The MGH intends to deliver the highest quality of care with the best possible outcomes at the lowest reasonable cost."

One indication of that intention is the strength of the nurse midwife program at the MGH. All mothers expecting low-risk deliveries have the choice of an obstetrician or a nurse midwife. Many of the center's patients have opted for one of the program's nurse midwives, usually because they want a highly personal, low-intervention delivery, according to Sherrin Langeler, CNM, MGH midwife. All MGH midwives are experienced registered nurses who have passed a national certification exam. Their expertise encompasses patient education and counseling, writing prescriptions, administering local anesthetics and performing minor surgery, if necessary, to facilitate delivery.

The new service also has formed strong bonds with the renowned obstetrics division of Brigham and Women's Hospital. A joint residency program in obstetrics and gynecology has been established, which marks an evolution of a 14-year relationship between the two hospitals. In the past, MGH was routinely incorporated into the BWH training program. The new program will evenly divide both governing and training responsibilities between the two facilities. Rather than a spirit of competition, the program symbolizes the attitude of cooperation and collaboration that has distinguished the affiliation of the two institutions.



Michaela Abby Mellen was the first baby born in the hospital's new Mother and Child Center, less than 24 hours after its official opening celebration.



Joseph V. Bonventre, MD, PhD

Combating kidney failure

A monoclonal antibody that has been used experimentally in patients to combat rejection of transplanted kidneys has been shown to prevent acute ischemic kidney failure in animal studies. The finding raises the hope of developing a new treatment for ischemic kidney failure in humans, which accounts for more than half of the cases of kidney failure seen in hospitals. Approximately 40 to 60 percent of the patients who develop acute kidney failure die. Ischemia results when blood flow to an organ or tissue is insufficient. In the brain, ischemia causes a stroke; in the heart, a heart attack; in the kidney, it can result in kidney failure.

"The antibody prevents white blood cells from sticking to the blood vessel wall. These experiments have convinced us that these interactions are critically important determinants of cell death and kidney failure," says Joseph V. Bonventre, MD, PhD, a nephrologist in the MGH Department of Medicine and senior author of a paper describing the finding published in January. "The results raise the hope that new therapies designed to block white blood cell-vascular wall interactions will be useful in preventing kidney failure among patients who suffer some sort of trauma or have a precipitous drop in blood pressure."

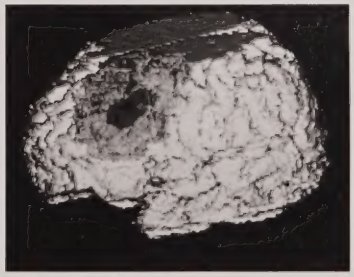
Other authors of the study were Katrina J. Kelly, MD, of the MGH Renal Unit; Winfred W. Williams Jr., MD, an MGH nephrologist; and Robert B. Colvin, MD, chief of Pathology.

A road map of the brain

Ian Pelkey began having epileptic seizures when he was about 4 months old. Medications failed to be effective, and Ian was transferred from a Vermont hospital to the MGH. Extensive studies using an electroencephalogram (EEG) and PET (positron emission tomography) scanning revealed a subtle area of abnormal tissue in the left frontal lobe of Ian's brain. Another try to control his seizures through medication was partially successful, and Ian went home for several months. But then he started to get worse, and it became clear that surgery was the only hope.

Ian was lucky. His surgeons were guided by one of the most recent developments in medical imaging — computer technology that allows information from several different kinds of images to be fused into a single picture.

The resulting map of both the function and anatomy of Ian's brain confirmed the suspicion that Ian's seizures were emanating from the abnormality in his left frontal lobe. Furthermore, the map precisely guided the neurosurgeons during surgery, and they confirmed that the cells in the suspect area were firing in an epileptic pattern. The neurosurgeons then removed the malfunctioning area.



Since the operation, Ian appears to be developing normally and is not expected to suffer cognitive deficits from his surgery. And he has not had a single seizure since the procedure.

PATIENT CARE

New MRI offers fast stroke diagnoses

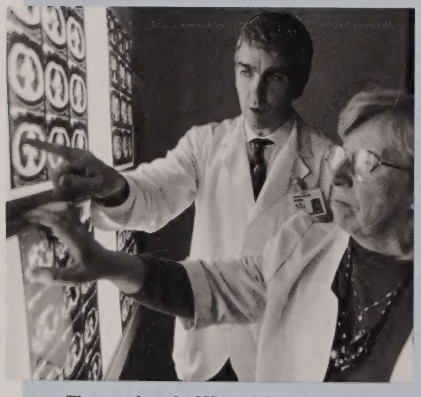
A new form of MRI (magnetic resonance imaging) known as functional MRI, may make the difference between life and death for stroke patients at the MGH. Largely developed at the MGH, functional MRI is fast — ultrafast. In a matter of seconds it shows the location and extent of a stroke. It also shows whether blood is flowing to tissues and how well brain cells are functioning. In a stroke, which is caused by the obstruction of blood vessels in the brain, restoring blood flow quickly can be a matter of life or death.

MGH last year became the first hospital in the world to have an MRI unit with ultrafast capability available to diagnose suspected stroke patients 24 hours a day. Not only can the technique allow the experimental use of new stroke-limiting drugs, it can sometimes enable direct intervention to open up clogged blood vessels.

"The functional neuro-MRI techniques that make this new approach possible were really invented here at the MGH," says James Thrall, MD, chief of the Radiology Service. "In just a couple of years we've moved from very theoretical studies, like looking at the effect on the brain's metabolism of opening and closing the eyes, to providing a critical component of a new type of patient care."

Thoracic Oncology Center opens

A multidisciplinary approach to thoracic cancer is now available at the MGH in the convenient and coordinated setting of the new MGH Thoracic Oncology Center, which opened in September 1994. In a single visit to the center, patients can meet with many of the specialists — clinical nurse specialists, physical therapists, social workers, dietitians and others — who will collaborate on their care. In addition, patients review their particular needs and develop an individualized treatment plan with physicians specializing in medical, surgical and radiation oncology. Consultations also can be arranged with respiratory therapists, speech pathologists, the MGH Pain Center and the MGH Quit Smoking Service.



Thomas Lynch, MD and Ruth Dempsey, RN

According to Thomas Lynch, MD, an MGH medical oncologist who helped establish the center, offering a multidisciplinary approach to thoracic cancers makes sense medically. The work of MGH physicians in the last five to ten years has shown that a combination of chemotherapy, radiation and surgery can make a difference in long-term survival for many patients.

Construction to begin on proton beam facility

In a World War II-era facility designed for nuclear physics research on the campus of Harvard University, MGH researchers for 34 years have been evaluating the efficacy of proton beams for several categories of tumors and blood vessel abnormalities. Their efforts have demonstrated a substantially higher success rate for several tumor types than is achieved by conventional radiation treatments.

Planning has begun for a new facility, the Northeast Proton Therapy Center, which will be built on Fruit Street immediately across from the MGH Clinics Building and will thus have the advantage of immediate proximity to both the MGH main campus and the Massachusetts Eye and Ear Infirmary. A groundbreaking ceremony for the new facility is scheduled for September 1995.

While the current facility can generate only moderate energy beams, which are useful against those tumors relatively close to the body surface, the new facility will feature beams of sufficient energy to irradiate tumors at all body sites. Treatments will be more comfortable for patients, and three treatment rooms will dramatically expand the number of patients that can be treated. The facility is expected to open in 1998. By the year 2010, it is expected to deliver 16,000 treatments to about 1,000 patients annually. At least half of the treatments will be provided as part of research studies designed to improve the therapy and test its effectiveness against other types of cancer.

PATIENT UPDATE

A British girl can breathe again

Twelve-year-old Rebecca Mitchell of Leicester, England, was literally being strangled by her own body. Rebecca had been born with several abnormalities in the large vessels carrying blood away from her heart. As she grew, so did her blood vessels, and they began putting more and more pressure on her trachea. Soon the constriction would cut off her air supply altogether.

British surgeons had operated on her three times and then had placed a silicone tube in her trachea to keep it open, but it was only a temporary solution. Her best chance, they told her family, was to seek help from Hermes Grillo, MD, an international leader in tracheal surgery and then director of the General Thoracic Surgery Group at the MGH.

Although the condition was described as "exquisitely rare," Grillo had seen a Dutch patient with a similar condition only a month before Rebecca's arrival at the MGH. After a careful evaluation of the nuances of anatomy involved in her condition, Grillo and his colleague Cameron Wright, MD, performed a 12-hour operation that essentially rerouted the vessels around Rebecca's heart to relieve the pressure on her trachea. Following surgery, Rebecca spent two weeks in the MGH Respiratory Intensive Care Unit under the watchful eye of nursing staff specially trained in managing postoperative care for thoracic surgery patients, and another week on the thoracic care floor. By that time, her airway had expanded to almost normal size. Now back in England, Rebecca rollerskates, plays tennis and rides horses.

Deena Agamy, 2, plays with her sister, Amiera.

Teamwork saves a critically ill infant

No one thought she would survive. But Amiera Agamy fooled them all.

Born critically ill, Amiera's heart was so weak that she had to be placed on a mechanical ventilator to support her breathing while she received medication to strengthen her heart. At first she did well, but then she developed a fever and her lung function began to deteriorate, probably as the result of an infection.

Soon her heart muscle showed signs of inflammation, and pressure in her lungs began to impede the normal flow of blood from the heart to the lungs. To keep her alive, doctors placed her on ECMO (extracorporeal membrane oxygenation), a machine partially developed and tested at the MGH that takes over for the heart and lungs and allows immature or damaged organs to rest and heal. Still, Amiera's condition did not improve.

Because of the risk of internal bleeding caused by necessary blood thinning medications, Amiera could not be left on ECMO indefinitely. Time was running out, and the team caring for her began to consider a risky option — a procedure called a balloon atrial septostomy.

Amiera's weakened heart had to fill with more blood than usual to stimulate the heart muscle to pump harder. Unfortunately, this caused the heart to overfill, further stretching and weakening the organ. The procedure would create a hole between the two upper chambers of the heart, reduce the filling of each chamber, and, if successful, stop the downward weakening spiral.

The septostomy produced some improvement, but Amiera still required ECMO. Two days later, a CT scan showed evidence of bleeding in her brain. ECMO had to be discontinued.

"The doctors were very honest with us," Amiera's mother says. "They didn't expect that Amiera would survive more than a few minutes after the ECMO was removed."

But Amiera, the procedure and the intensive care of a dedicated team of nurses, physicians, and therapists made the difference. When Amiera was taken off ECMO, her heart beat weakly at first, but over the next few hours it became stronger. Within days, it was nearly normal. Two months after her birth, her parents took her home.

PATIENT UPDATE

New surgery offers speedy recovery

Michael Montagano, 70, of Watertown, Conn., had an abdominal aortic aneurysm. His doctor told him it was time to operate before the aneurysm ruptured — a life-threatening event.

Conventional aneurysm surgery is a major operation requiring a lengthy recovery period. But Montagano's blood was not clotting properly, and his doctors felt it was too risky to operate. Instead, he was referred to the MGH, where a new and less invasive procedure for treating his condition was being tested.

Similar to methods used to open up clogged arteries, the new technique uses a catheter inserted through an artery in the leg. The catheter is threaded up to the aneurysm, where a surgeon inserts an artificial polyester blood vessel, which has been tightly rolled up within a capsule at the end of the catheter. The ends of the graft are secured above and below the aneurysm with metal hooks and pressed into place by inflating a tiny balloon.

"Repairing an aneurysm through a catheter is a much less extensive procedure that should take significantly less operating time," says David C. Brewster, MD, who performed Montagano's surgery. "But the most striking difference is the postoperative recovery."

Montagano was back in Watertown within three days of surgery. He felt well enough to stop for dinner with his wife and visit with friends on his way home. "I have talked to people who have had the surgery done the regular way," says Montagano. "In my opinion, mine was 500 million times better! I hardly knew I had it done."

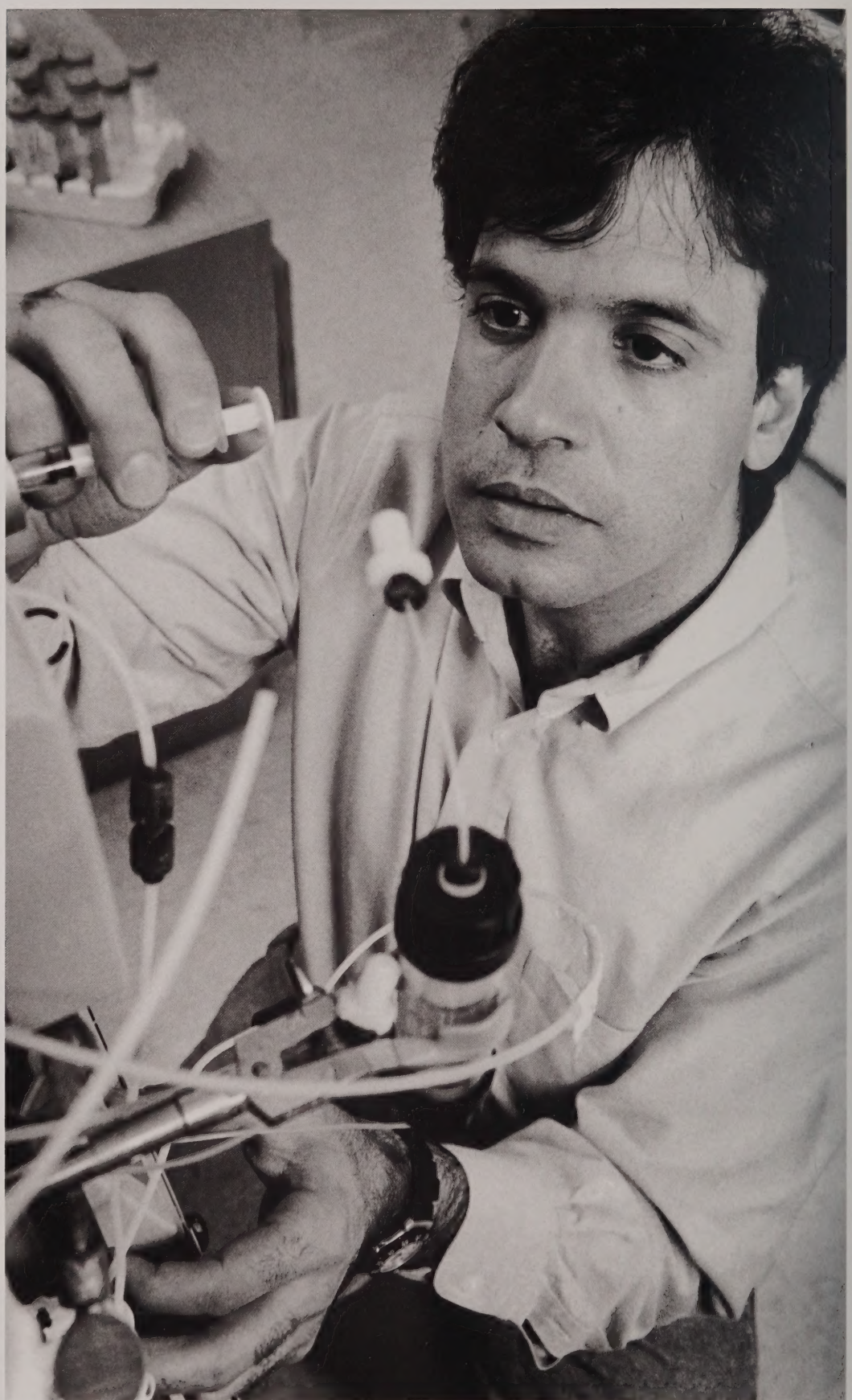
RESEARCH

Zinc linked to Alzheimer's disease

Researchers at the MGH have found that elevated levels of zinc in the brain may play a role in the formation of amyloid plaques, a primary feature of Alzheimer's disease. Amyloid plaques, glue-like deposits made up of fragments of a small protein called A-beta, are believed to be toxic to brain cells. These protein fragments, MGH researchers discovered, bond strongly to zinc to form the insoluble amyloid typical in Alzheimer's.

Scientists caution that it is too soon to say that elevated zinc levels are a cause of Alzheimer's. "The most immediate benefit of this work is better understanding of how amyloid is deposited," notes Rudolph E. Tanzi, PhD, director of the MGH Laboratory of Genetics and Aging and a co-author of the study. "We hope to use this information to build model systems to study amyloid formation and eventually to test agents that may block the process. But without actual patient studies, we cannot speculate whether elevated zinc levels could actually cause the disease."

Alzheimer's disease affects approximately 4 million people in the United States and is characterized by a progressive degeneration of the brain, resulting in memory loss and dementia.



Striving to crack the mystery of Alzheimer's disease: Rudolph E. Tanzi, PhD.

Cell cycle gene linked to breast cancer

An MGH research team — including Timothy Wang, MD, Emmett Schmidt, MD, and Andrew Arnold, MD — found that a gene playing a key role in stimulating cell division also functions as an oncogene in animals. Overactivity of the cyclin D1 gene, which was discovered in 1991 in Arnold's laboratory and has been implicated in a variety of human cancers, proved capable of causing breast tumors in mice. Cyclin D1 is one of a group of genes that control the cell cycle, the series of steps cells go through to reproduce. The investigators note that the gene's activity could eventually become a target for therapeutic drugs or help to predict whether abnormal breast tissue will eventually become cancerous.

Gene therapy possible for brain cancer

In November, MGH researchers reported important progress toward developing a gene therapy approach to brain cancer. E. Antonio Chiocca, MD, PhD, Xandra O. Breakefield, PhD, and others described how a mutated version of the herpes simplex virus (HSV) combined with the antiviral drug, ganciclovir, destroyed malignant brain tumors in rats. The researchers used a genetically altered version of HSV that could replicate only in dividing cells. In the brain, the only such cells would be cancerous. When the mutant virus is injected into a tumor, its genetic material is incorporated into the genetic material of the tumor cells, which renders them vulnerable to ganciclovir. The researchers say that the technique is several years away from human trials.

A genetic library for cancer research

Most discoveries raise more questions than they answer, one explanation, perhaps, for basic research seeming to move forward so slowly. Exploring the leads generated by the recent discovery of a gene implicated in breast cancer, called BRCA1, for instance, promises to be a long and painstaking process. But it is one that MGH researchers in the Center for Cancer Risk Analysis are now tackling in earnest.

Members of the center's staff have assembled a genetic library of blood samples from 400 women who developed breast cancer at age 40 or younger. Searching the samples for mutations in genes associated with breast cancer will provide scientifically reliable information on exactly how important each gene is in the development of the disease.

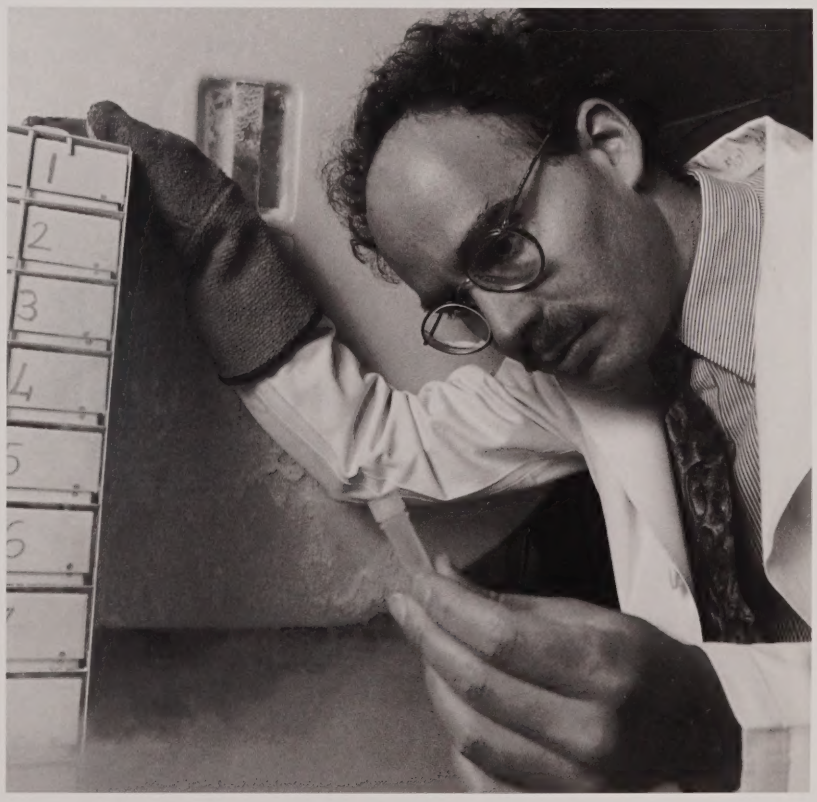
"About 10 percent of all women who get breast cancer are thought to inherit a susceptibility to the disease," says Daniel A. Haber, MD, PhD, director of the center. "With the genetic library of blood samples, we are hoping to determine to what extent the BRCA1 gene is responsible for that susceptibility, particularly in women who develop breast cancer at an early age and may be at greater risk of having a genetic cause."

Information gathered through the center's work will be crucial to developing a practical blood test for BRCA1 mutations, and it will help physicians to spare low-risk women from unnecessary treatments and give high-risk women appropriately careful attention.

Once a test is developed, new issues arise such as assessing the meaning of risk and protecting the confidentiality of test results. But beyond tests, the work could also offer insights into the basic understanding of exactly how genes cause cancer — a lot more questions, certainly, but a good deal of hope as well.

MGH and BWH top NIH funding

In fiscal year 1994, the MGH received more than $98 million in awards from the National Institutes of Health (NIH), returning to the number one position among independent U.S. hospitals receiving NIH funds. Brigham and Women's Hospital (BWH) held the number two spot with $92.5 million. Overall the two institutions received almost $200 million for direct and indirect costs from the NIH to support biomedical training and research into the causes, cures and prevention of disease as well as basic science investigations.



Daniel A. Haber, MD, PhD: Refrigerated blood samples hold clues for cancer researchers.

COMMUNITY

MGH health centers: A primary source of community care

The current managed care environment has focused attention on primary care delivery, and that has brought new prominence to the distinguished work of the MGH health centers in Charlestown, Chelsea and Revere. The health centers are proof that a large teaching hospital like the MGH can serve local needs in what might otherwise be a medically underserved community.

The Bunker Hill Health Center (BHHC) in Charlestown has a 25-year history of actively evaluating community needs and designing programs to meet them. Camp Bunker Hill, a day camp and after-school program for youngsters with emotional or behavioral problems, is one result of BHHC's special concern for local children. The annual health fair, "Charlestown Loves a Healthy Heart," is a direct response to the 1986 discovery that there were more deaths from heart disease in Charlestown than in any other Boston neighborhood. The fair offers free blood pressure and cholesterol screening, as well as information on heart disease and its risk factors. Last year BHHC also sponsored Prevention Day, part of a statewide effort to promote good health.

Chelsea Memorial Health Center (CMHC) has been working in one of the state's poorest communities since 1972. It operates one of the few 24-hour emergency departments in the metropolitan area that is not located in a hospital. The majority of CMHC's staff is bilingual, reflecting the center's concern for the high number of Spanish-speaking Chelsea residents. A home visiting program brings primary care to many of the community's elderly, and a satellite clinic at Chelsea High School offers a full range of services to adolescent patients. Staff members also are involved with several local projects aimed at combating youth violence, addressing issues related to AIDS and HIV infection and improving public health services.

Revere Health Associates (RHA), which has been operating since 1981, serves a diverse population. One such group is the large local Cambodian population; the center offers three on-staff Cambodian interpreters.

RHA works closely with the Chelsea Memorial Health Center, which is only a few minutes away. In the summer of 1995, RHA moved into larger renovated quarters at 300 Ocean Ave.

Last year the MGH took steps to strengthen its bonds with the health centers by linking all three health centers and the main MGH campus with a shuttle bus. The administration of the centers was also restructured to provide each center with an on-site medical director, who directly oversees clinical operations, rather than a single director who oversees all three centers. The posts have been filled by Lorenzo Lewis, MD, at BHHC; Roger Pasinski, MD, at RHA; and Tom Sterne, MD, at CHMC.

Capital support for health centers

In June, the MGH joined forces with seven other Boston teaching hospitals to provide $1.5 million toward a total of $13.7 million to help community health centers in Boston. The institutions pledged loan guarantees through the Community Health Center Capital Fund, which will make loans available to local health centers for capital improvement projects such as repairing, improving or replacing buildings and major equipment.

In a separate development, $300,000 in linkage funds paid by the MGH in conjunction with the operation of its PET scanner are supporting maternal and child health services affiliated with the hospital's patient care network under an agreement reached with the state Department of Public Health (DPH).

MGH health centers in Charlestown, Chelsea and Revere will receive $200,000, while the additional funds will support expanded services in the Point neighborhood of Salem, offered through the North Shore Community Health Center, which is affiliated with North Shore Medical Center.

PATIENT UPDATE

A vital member of the community

In 1980, Antonio Velez decided to act on family advice and came to Massachusetts to get care for his ailing wife, Edith. Since then the couple has tried a number of times to return to their native Puerto Rico. Each time health problems made the trip impossible. Today, Velez, 71 years old and suffering from debilitating arthritis, looks to his once gravely ill wife for his daily care in their downtown Chelsea apartment. Throughout the intervening years, the Velezes have turned again and again to one of the cornerstones of the local community: the MGH Chelsea Memorial Health Center.

The MGH community health centers in Charlestown, Chelsea and Revere are not simply suburban outposts of the MGH — each is a vital member of the community it serves.

"We take the broadest, most comprehensive approach possible when caring for our patients," says Denise Sidorowicz, RNC, MSN, a nurse practitioner at MGH Chelsea Memorial Health Center. "We help sustain people like Antonio and Edith because we meet more than their medical needs."

For patients like the Velezes, who speak only Spanish and whose mobility is limited, that means making available services such as multilingual staff members who act as interpreters, scheduling appointments for husband and wife at the same time to limit the number of trips they must make to the health center, and offering a free shuttle bus to the MGH should they need to see a specialist.

COMMUNITY

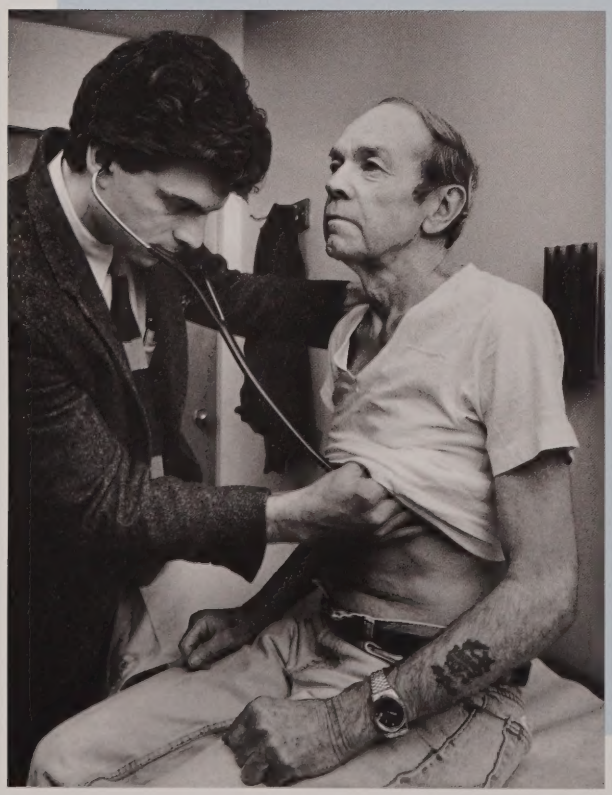
Project ProTech opens eyes and doors

For high school students who are interested in pursuing careers in health care, Project ProTech has been an eye- and door-opener that has bridged the gap between the worlds of school and work. The MGH has participated in the program, founded by the Boston Private Industry Council, for four years by providing mentors and job training to high school students beginning in their sophomore year and continuing through graduation. ProTech students are participating in a specially designed case study in which they follow a fictitious patient through the hospital from admission to discharge.

Darreyl Bugg, a second-year student in the program, had this to say about his MGH mentor: "If all I learned from him were the skills necessary to work in a pathology department, that alone would have benefited me. But he was interested in me as a person. He became not only a supervisor but also a friend. He made me believe that I was somebody too. He helped me gain faith in myself."

Support for the homeless

With a transient, difficult-to-reach and ill-defined population as its target, the MGH Medical Program for the Homeless, part of the citywide Boston Health Care for the Homeless program, provides a network of support services to Boston street dwellers. From its hub at the easily accessible Medical Walk-In Unit, the Medical Program for the Homeless offers preventive medicine at its most cost effective. With the proper support, many homeless individuals can address the complex physical, emotional and social problems they face. Below: Michael Bierer, MD, examines a homeless man in the Medical Walk-in Unit.



Timilty partnership inspires young researchers

Tony Hendricks joined the MGH research community in October to study memory loss. His commitment to research is not unusual at an institution like the MGH — except for the fact that he is only 13 years old.

Tony is one of 54 students enrolled in the MGH-Timilty

Timilty students proudly display their Citywide Science Fair awards.

partnership's mentoring program that matches interested sixth, seventh and eighth graders from the Timilty Middle School in Roxbury with adult mentors at the MGH. From September to February each year, the student-mentor pairs develop science projects together, presenting their work at the annual Timilty science fair. The MGH-Timilty partnership dates back to 1989, when the two institutions joined forces to enhance the quality of the school's science education curriculum. Last June, the Howard Hughes Medical Institute awarded the program a $375,000 five-year grant, which includes support for curriculum development, program assessment and student and teacher programs, such as summer teacher fellowships at the MGH.

PEOPLE

Black achievers honored

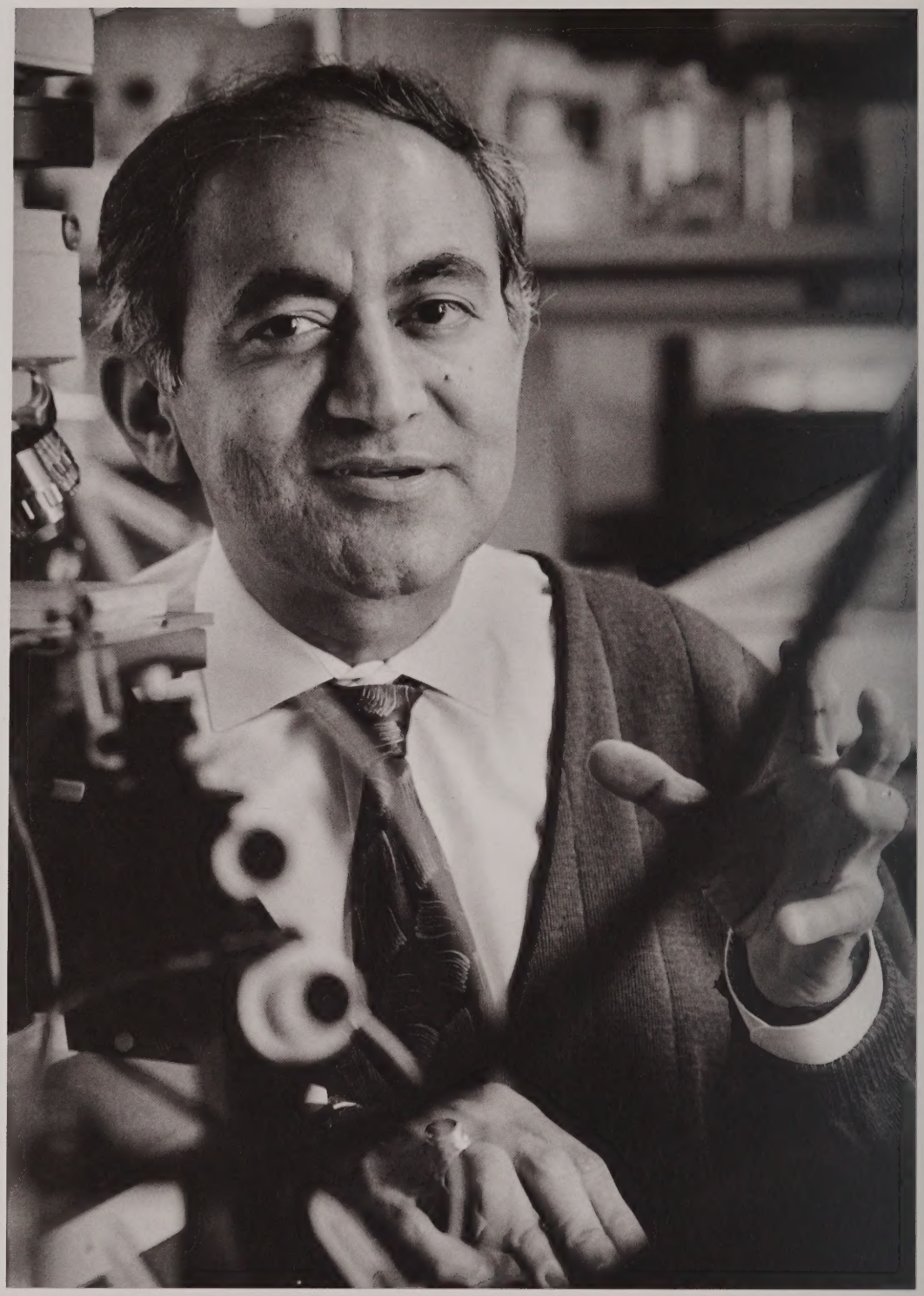
Five MGH employees were named Black Achievers by the Greater Boston Branch of the YMCA. Honored at the Copley Marriott in January 1995 were Tamara Callahan, MPP, a Harvard Medical School student and research assistant in the Reproductive Endocrine Unit; Ronald Greene, RN, staff nurse, Emergency Services; Gwen Mitchell, LPN, Intensive Care Nursing; Rodney Simmons, shipper and receiver and lab aide, Materials Management and Signal Transduction Lab; and Carolyn Washington, operations coordinator, Intensive Care Nursing.

Martie Soper, RN: Caring for patients under fire

MGH nurse awarded the Bronze Star

Nurses have a challenging job, but usually no one is trying to shoot them while they do it. That wasn't true, however, for Martie Soper, RN, of the MGH Cardiac Care Unit, when she found herself under sniper fire while treating wounded soldiers in Somalia two years ago.

More than a year and a half after she had returned to her position at the MGH, Soper's work overseas was rewarded in November 1994 with a Bronze Star, one of the military's highest medals of honor. Soper was on active duty with the 439th Aeromedical Evacuation Squadron based at Westover Air Reserve Base in Chicopee, Mass., and was in charge of triaging wounded UN troops out of combat areas to hospitals in Pakistan and Germany.



Rakesh K. Jain, PhD

An outstanding investigator

Rakesh K. Jain, PhD, a researcher in the MGH Cancer Center, was awarded a seven-year, $8.3 million Outstanding Investigator Grant by the National Cancer Institute in January 1994. The grant will support Jain's work on five projects exploring different aspects of tumor physiology.

Diversity becomes a priority

The MGH Board of Trustees has endorsed a strategic plan for a concerted, cohesive effort to create a more welcoming and supportive environment for the increasingly diverse patient population the MGH serves.

Barbara Holland, director of Diversity

Led by the MGH's director of Diversity, Barbara Holland, the effort includes diversity assessment and expansion of recruitment efforts for people of color and people with disabilities and an increase in support systems for a diverse work force. These efforts will help ensure the MGH continues to attract and retain the very best people who are able to respond sensitively to the many needs of all of the hospital's patients.

"To deliver high-quality health care, the MGH must have a staff of diverse backgrounds, skills, education and experience reflective of the communities it serves," says Holland. "In addition, effective management of our work force will lead to better problem solving, decision making and productivity."

The MGH is committed to making the hospital both the medical provider and employer of choice in an increasingly diverse environment. A trustee committee on diversity is monitoring progress, making recommendations on diversifying the work force, advocating for a richly diverse institution at all levels of the organization and ensuring that diversity is a part of all daily activities.

An award-winning treatment for psoriasis

At a ceremony in September on Capitol Hill in Washington, Thomas B. Fitzpatrick, MD, emeritus chief of Dermatology at the MGH, and John A. Parrish, MD, chief of Dermatology and director of the Wellman Laboratories, received the National Health Council's National Medical Research Award for their work in developing a new treatment for psoriasis, an uncomfortable and sometimes humiliating skin condition afflicting millions of people in the United States. The treatment, introduced at the MGH in 1974, uses ultraviolet light combined with oral doses of psoralen, a drug of ancient Egyptian origin that causes the skin to become sensitive to light. The approach is in wide use today.

The award recognizes medical scientists who have made outstanding contributions to the understanding, treatment and/or cure of various chronic illnesses.

New organization unifies medical staff

By an overwhelming vote of the Massachusetts General Physicians Corporation (MGPC) and in agreement with the MGH chiefs of service, a new MGH physicians organization was founded in October. The new Massachusetts General Physicians Organization (MGPO) assumed the functions previously handled by the MGH Professional Service Corporation (PSC) and the MGPC.

"I am pleased and honored to lead this new physicians organization," says surgeon-in-chief W. Gerald Austen, MD, who was appointed president and chief executive officer of the MGPO. "Unifying our medical staff is a critical move toward organizing resources to meet the challenges before us. The MGPO will be a key force in developing more cost-effective and market-responsive services, and it will be driven by a commitment to the hospital's traditional mission: excellence in patient care, education and research."

A personal best for leukemia patients

When Jill Nelson, RN, lost a patient to leukemia last year, she took it personally. She felt that something more should be done for leukemia patients, and she resolved to help. The result was the first annual 6K "Walk for a Cure" held on the Charles River Esplanade, an event that drew more than 1,000 walkers. "It was more than a fund-raiser," says Nelson. "It was a citywide show of support and compassion. It was just the best day." The walk raised more than $50,000 to support leukemia research, patient aid, public health education, professional education and community service.

Jill Nelson, RN: Organizing support for leukemia patients

MGH financials and statistics

THE GENERAL HOSPITAL CORPORATION

Excerpts from audited financial statements (in thousands of dollars). Year ending September 30, 1994.

	1994	1993
Revenue		
Net patient service revenue	$530,557	$525,463
Other operating revenue:		
Research and other specific purposes	179,042	177,409
Other	24,253	29,762
Total operating revenue	**$733,852**	**$732,634**
Expenditures		
Operating expenses:		
Salaries and related compensation	$325,526	$342,033
Supplies and other expenses	200,435	188,762
Depreciation	50,397	45,821
Interest	13,484	14,756
Provision for doubtful accounts	14,617	13,264
	604,459	604,636
Research and other specific expenses	123,479	119,203
Total operating expenditures	**727,938**	**723,839**
Surplus (loss) from operations before adjustments	5,914	8,795
Adjustment for third-party payors, estimated settlements, and loss on bond refinancing	5,304	(8,273)
Surplus (loss)	**$11,218**	**$522**

MGH: Facts and figures 1994

Available beds		899
Average occupancy rate		76.36%
Admissions		34,992
Average length of stay (in days)		7.35
Surgical procedures		
Inpatient		19,765
Ambulatory		8,090
Total		**27,835**
Ambulatory visits		
MGPO visits		(approx) 320,000
Clinic visits (hospital and some group)		413,210
Health centers		149,697
Bunker Hill	51,601	
Chelsea	71,763	
Revere	26,333	
Emergency visits		
Main campus		64,663
Chelsea		16,486
Total		**964,056**
Staff		
Staff physicians		1,862
Residents		545
Clinical fellows		325
Research fellows		653
Registered nurses		1,152
Other employees		6,046
Total employees		**10,583**
Research expenditures		$170,000,000

MGH leadership

The Massachusetts General Hospital

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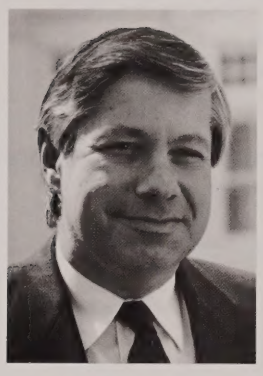
McLean Hospital

Message from the Chief Executive Officer

The delivery and financing of health care in America is undergoing a great transformation, and like many other hospitals throughout the country, McLean has been affected by these changes. As a result, McLean has spent the past year restructuring, redesigning and reinventing itself to meet the growing needs of our patients.

Change is not new to McLean. Throughout 184 years of service the hospital has redefined itself many times based on the evolving needs of society and the institution's own resources. As a result of this innate ability to adjust to new needs and demands, the hospital can point to many achievements this past year, despite the intensely competitive health care environment.



During 1994, admissions continued to increase, length of stay continued to decline, and we dramatically lowered our operating costs. At the same time, the hospital's research programs attracted more funding than ever before, and our $30 million capital campaign is on track for completion in 1996.

As you will read in this report, McLean's new Clinical Evaluation Center saw more than 4,400 patients in its first year of operation, many of whom came from area hospitals. The Child and Adolescent Program is expanding through several off-campus ventures. And to meet the growing needs of an older population, the Geriatric Psychiatry Program increased the number of beds in its short-term and Alzheimer's/dementia units and opened a new collaborative unit with Spaulding Rehabilitation Hospital.

For the fourth consecutive year, McLean was cited as among the top hospitals for psychiatric care in the country in *U.S. News & World Report's* annual "Best Hospitals" survey. And we are very proud that once again, McLean's training programs in adult and child psychiatry, psychology and social work attracted top-notch trainees from all over the country.

Embracing change and searching for answers to the unknown are the hallmarks of an institution dedicated to providing leadership. At McLean these pursuits are part of our history. As in the past, our mission remains providing patients with the best clinical care possible, advancing the frontiers of knowledge through basic and clinical research and training the future caregivers and leaders of our profession.

Steven M. Mirin, MD
Chief Executive Officer
Psychiatrist-in-Chief
McLean Hospital

PATIENT UPDATE

"I watched my dad become a person again."

The diagnosis was the last thing Christine Schmidt expected to hear.

For nearly four months she had fretted over and prayed for her 65-year-old father's recovery from an aneurysm that had been surgically repaired in his brain. Now her dad, Richard Schmidt, was walking, talking, breathing and eating on his own again. But he was confused, and the diagnosis was not good. Doctors said that a degenerative dementia, not the aneurysm, was causing her father's confusion. His mental state would get worse, not better.

Following the doctors' recommendation Christine put her father in a nursing home. As they predicted, things got worse. Schmidt became increasingly agitated. He started taking and hoarding things that were not his. Most frightening, he kept trying to go home, wandering away from the unlocked nursing home, confused and alone.

"The nursing home just wasn't equipped to handle someone like Dad," says Christine. "They tried, but they didn't know how to control him. Finally, they sent him to McLean. It was the best thing that could have happened."

Schmidt was admitted to McLean's Special Care Unit, a secure, 15-bed unit devoted exclusively to treating elderly patients with Alzheimer's disease and other dementias. The clinical staff was able to determine that Schmidt's symptoms were not related to a degenerative dementia, but more likely to side effects of his medications. Within two weeks he was discharged — his medications, his condition and his diagnosis all had changed for the better.

PATIENT CARE

Geriatric Psychiatry Program expands

Already the largest in New England, McLean's Geriatric Psychiatry Program expanded in 1994 to meet the growing needs of an aging population. The short-stay inpatient geriatric unit, the oldest of its kind in the region, now provides 25 beds for patients who can benefit from its intensive program of therapeutic activities designed to rebuild skills and independence. Patients receive thorough psychiatric, neurological and medical evaluations to ensure proper diagnosis, treatment and after-care plans.

Geriatric Special Care Unit offers hope

McLean's Geriatric Special Care Unit (SCU) provides 15 secure beds for patients with Alzheimer's disease and other dementias. Staffed by geriatric psychiatrists, psychologists, nurses and social workers who are expert at working with these patients, the SCU focuses on stabilization, treatment and the development of after-care plans that will help patients stay as well as possible.

Having devoted their careers to working with this special population, McLean SCU clinicians can recognize the drug reactions that sometimes masquerade as dementia; the clinicians are adept at behavioral interventions that can calm agitated patients and at therapeutic activities that help patients retain the skills of daily living.

For many patients and their families, this expertise is a lifesaver, as Christine Schmidt, a patient's daughter, testifies (see story on page 20). A change in medications and the calm, secure atmosphere on the SCU can have an immediate effect on a patient's condition.

Staff in the SCU work as closely with families as with the patients themselves. They educate family members about the course of their loved one's illness; teach them behavioral techniques that help counter the confusion, insomnia and agitation that often accompany dementia; and help link them with community resources, ranging from day programs to nursing homes that specialize in care for patients with dementia.

McLean opens new triage unit

Henry took pride in being a skilled machinist — an occupation he had depended on since high school to put food on the family table. A heart attack two years ago, however, made it impossible for him to find work. Potential employers thought he might be too much of a liability on the job. Henry felt robbed not only of his work but also of his identity. He became severely depressed and attempted to take his own life.

Fortunately, his son interrupted the suicide attempt and rushed Henry to McLean's Clinical Evaluation Center (CEC), the hospital's psychiatric triage unit, which offers crisis stabilization around the clock, seven days a week. At the CEC, a team of psychiatrists, internists, nurses and social workers stabilized Henry and prepared him for further inpatient treatment at the hospital.

Ann, a professional, was transferred to the CEC from a Boston hospital on the same day. She was suffering anxiety and an inability to identify her surroundings. The CEC staff quickly discovered Ann was being treated for a history of similar episodes. After consulting with her regular thera-

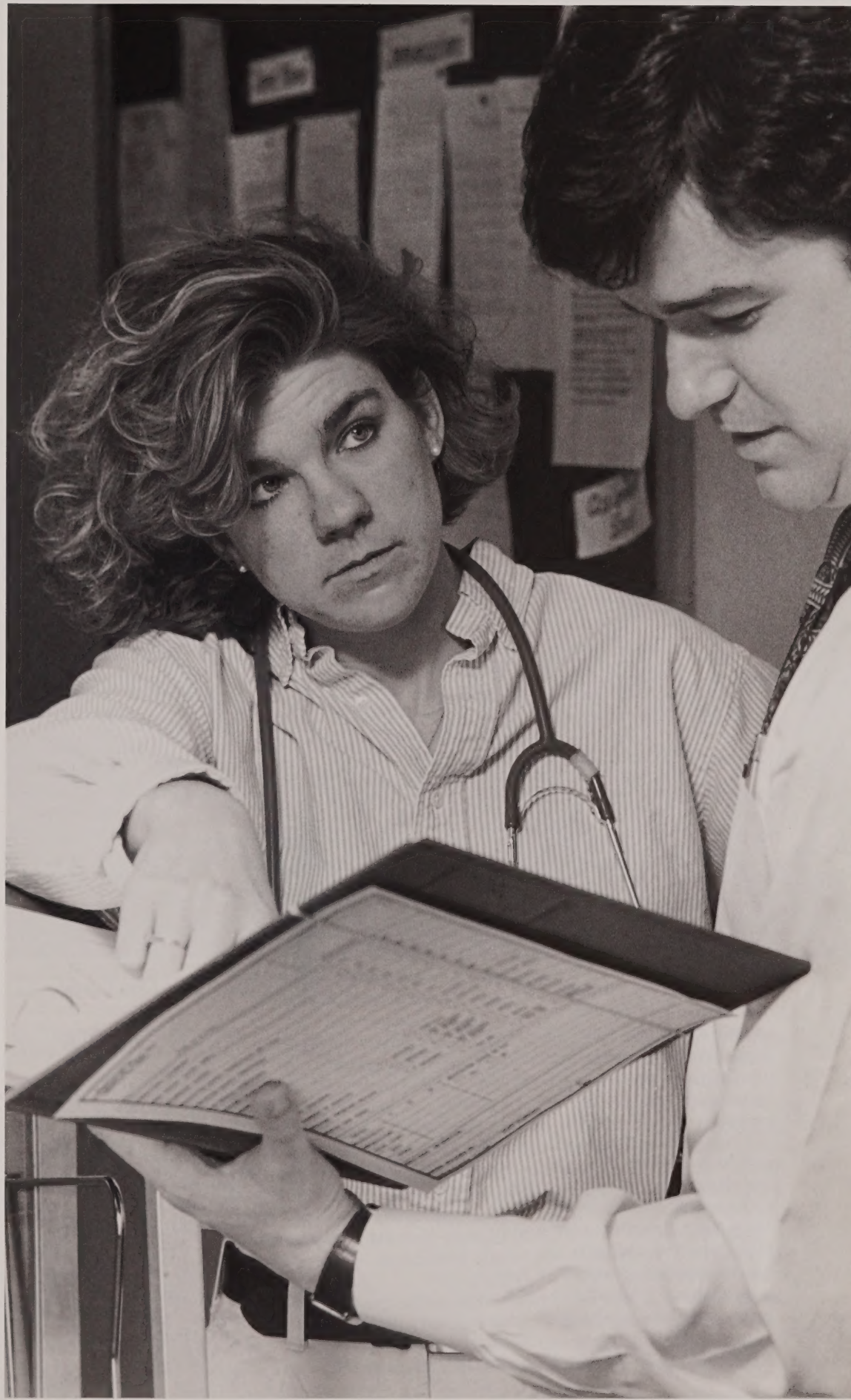
Lisa McGrath, RN, chats with a geriatric patient while checking her blood pressure.

pist, the psychiatrist on duty modified Ann's drug prescription, met with her family and arranged appointments for follow-up visits. She was able to go home that evening.

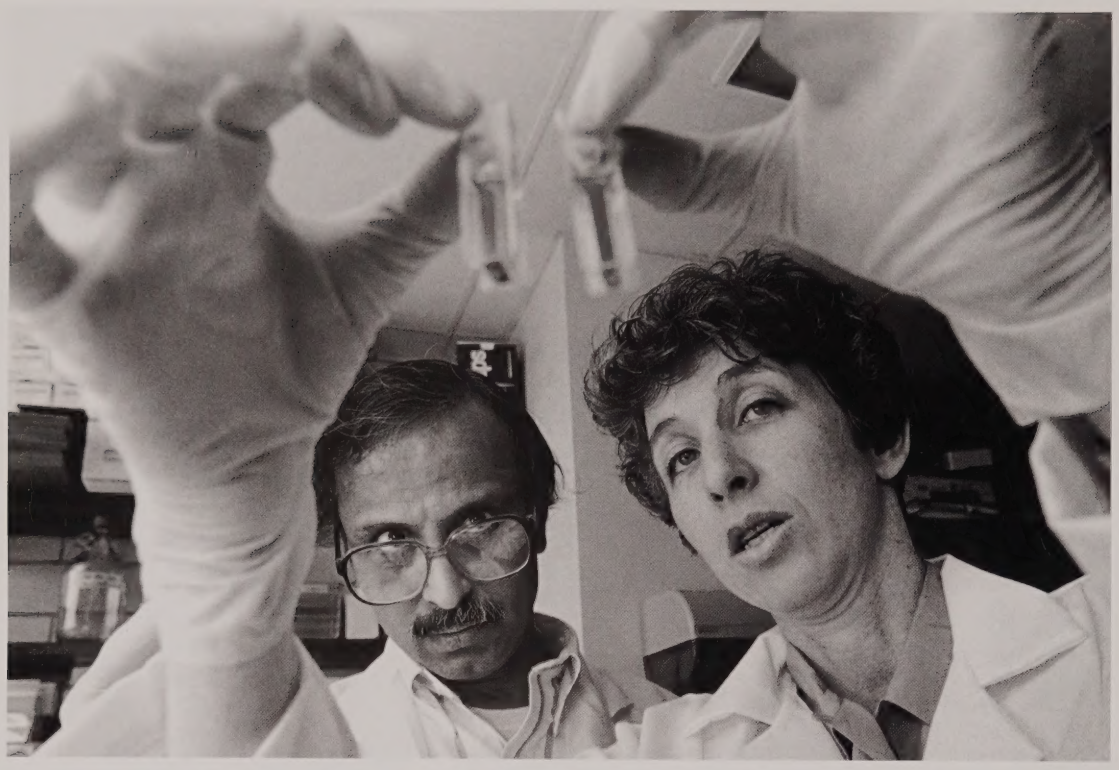
The McLean CEC was founded in 1994 and in its first year of operation treated more than 4,400 patients. One-third of all patients received last year at the CEC were referred by hospitals, a statistic that clearly illustrates the need for such a mental health resource in the Greater Boston area.

The new triage unit allows clinicians to arrange referrals quickly for patients in need of emergency psychiatric evaluation and crisis stabilization. In addition, referrers as well as walk-in patients have immediate access to McLean's full continuum of services.

Once received at the evaluation center, patients undergo physical and psychiatric evaluation. Following crisis stabilization, the CEC multidisciplinary team develops a plan of treatment. Patients with mental illness have individual needs and move along different paths toward recovery. The CEC team draws from McLean's extensive list of services and programs and working relationships with community providers to develop the treatment plan most suited to each patient, their family and caregivers.



Mental health specialist Kristen Keefe and William Carter, MD, assistant director of the McLean Hospital Clinical Evaluation Center, develop a patient's treatment plan.



Assistant biochemists Frida Grynspan, PhD, and Panaiyur Mohan, PhD, of McLean's Laboratories for Molecular Neuroscience, examine differences in tested cell samples.

RESEARCH

McLean investigators search for answers to mental illness

In William's case, Alzheimer's disease took its toll slowly, over several years. At first, he seemed like anyone else who is terrible with names, or who misplaces household items. Occasionally, he made trips to the grocery store only to forget the purpose of the trip. Then he had trouble finding his way home. The once sharp-minded accountant became irritated by his inability to think clearly, and he lashed out in frustration at his wife, sons and daughters.

Research conducted at McLean's Laboratories for Molecular Neuroscience has revealed clues that may lead to a brighter future for Alzheimer's patients like William and their families. Brain tissue samples of patients who died of Alzheimer's have revealed a large presence of the enzyme calpain, which destroys brain cells, and an absence of that enzyme's natural blocker.

Studies are under way to determine if a synthetic enzyme blocker can be developed to slow calpain's destructive activity without inhibiting normal functions of other enzymes in the brain. By gaining better insight into Alzheimer's effects on the body's chemistry, McLean researchers also are hoping to use chemical analysis of blood and spinal fluid samples to detect the disease and track its progression.

McLean investigators are working to develop a better understanding of mental illnesses, ranging from Alzheimer's disease in older patients to depression in children — like Sarah.

Unlike the gradual onset of William's illness, 11-year-old Sarah's mood changed dramatically about one month after her father left home. She became listless and napped often. Her favorite meal, macaroni and hot dogs, was pushed away like so many other meals at dinner. Sarah's teacher sent a note home to report her lack of attention in class. Her mother became alarmed when she found Sarah walking out across the delicate surface of a freshly frozen pond.

Sarah was diagnosed with depression. Although her illness brought obvious changes to her behavior, it also brought about significant physical changes undetectable to the human eye. Through the use of brain magnetic resonance imaging (MRI), McLean researchers are getting a better look at depression's physiological effects.

Investigators at McLean's Brain Imaging Center are studying structural brain changes in children and adolescents with depression. By studying the brain MRI scans of young depression patients like Sarah in comparison to those of healthy children and teens, researchers are gleaning a sharper understanding of the disease's physical manifestations, which hold clues to the cause of the disease.

McLean scientists now believe the early onset of depression may be linked to a decreased volume of the brain's frontal lobe. The finding provides a new way to identify children at high risk of developing depression, and ultimately may lead to strategies for preventing the disease.

Child and Adolescent Program crosses border

The McLean-May Health Collaborative (see story on page 25) has created one of New England's most comprehensive mental health programs for adolescents, and it is expected to serve more than 700 patients from Somerville and nearby urban areas each year.

Mona Bennett, MD, clinical director of McLean's Child and Adolescent Program, says: "Bringing mental health services into the communities where they are most needed has always been an important part of our mission. 1994 marked a significant expansion in our work with other providers and the first out-of-state venture for the Child and Adolescent Program."

An underserved area similar to Somerville is the New Hampshire seacoast. A lack of mental health providers who specialize in child and adolescent care, combined with a booming population,

has resulted in unprecedented demand for specialized children's services.

McLean's Child and Adolescent Program is working to meet these needs. One of the providers with which the program is collaborating is Portsmouth Mental Health Associates, a group practice that provides psychiatric and psychological services throughout southern New Hampshire. As part of this joint venture, a psychopharmacologist from the Child and Adolescent Program sees patients regularly at the Portsmouth Mental Health Associates office and assists in outreach to area schools.

The Child and Adolescent Program provides psychopharmacological evaluation, consultation, medication monitoring and patient/family support to more than a dozen schools, health care providers and community agencies, including the following:

- Comprehensive Outpatient Services, Inc., Boston (The Boston Center for Children and The Italian Home)
- Germaine Lawrence School, Arlington
- Health and Education Services, Inc., Beverly
- Jewish Family and Children's Service, Brookline and Canton
- LUK Crisis Center, Inc., Fitchburg
- Walker School and Home, Waltham.

The success of these new joint ventures has established a firm foundation upon which the Child and Adolescent Program is sure to continue building its outreach efforts.

Social work intern David Meyers of McLean Hospital's Child and Adolescent Program helps young patients express their feelings through art therapy.

Reaching out to children in need

She had heard of McLean Hospital, but did not know it was located in Massachusetts. Then her 15-year-old son, Martin, stole a kitchen knife and cut a six-inch gash in his arm. After the numerous fights, nights spent on the street and the drinking, this was the last straw. A social worker from the Department of Mental Health told her Martin needed help. She finally agreed.

The help came from McLean, but it was closer than she expected — in fact, just two blocks away at Somerville Hospital. In 1994, McLean's Child and Adolescent Program began co-managing the Adolescent Psychiatric Unit at Somerville with the May Institute, a leading provider of education, rehabilitation and residential services for mentally disabled children and adults.

Martin's mother could walk to the hospital on lunch breaks to see her son. On her first visit, a McLean-May child psychiatrist carefully explained Martin's depression. During his hospitalization, a staff clinical educator met with him each day and consulted with a teacher from the school he had attended. When Martin was discharged, a McLean-May social worker arranged outpatient counseling and promised to visit him at home. "We want to make sure he gets back on his feet," the social worker told Martin's mother. "Don't worry about bringing him to the hospital — I'll come to you."

McLean financials and statistics

THE McLEAN HOSPITAL CORPORATION

Excerpts from audited financial statements (in thousands of dollars). Year ending September 30, 1994.

	1994	1993
Revenue		
Net patient service revenue	$68,303	$75,751
Other operating revenue:		
Research and other specific purposes	15,783	15,232
Other	2,879	3,196
	18,662	18,428
Total operating revenue	**$86,965**	**$94,179**
Expenditures		
Operating expenses:		
Salaries and related compensation	$51,052	$57,589
Supplies and expenses	16,918	17,306
Depreciation	5,444	5,463
Interest	2,642	2,625
Provision for doubtful accounts, net	5,491	4,124
Total	81,547	87,107
Research and other specific expenses	11,905	10,909
Total operating expenditures	**93,452**	**98,016**
Surplus (loss) from operations before net adjustments to prior year estimate	(6,487)	(3,837)
Net adjustments to prior year estimates for settlements with third-party payors and other	(2,954)	982
Surplus (loss)	**$(9,441)**	**$(2,855)**

McLean Hospital: Facts and figures 1994

Beds	
Licensed	328
In service	205
Number of admissions	4,397
Ambulatory visits	69,655
Partial hospital visits	43,625
Residential care days	17,486
Night/respite care	26,526
Professional staff	141
Clinical fellows	27
Residents	49
Research fellows	20
RNs	168
Volunteers	300
Employees (total)	1,244

McLean leadership

The McLean Hospital Corporation

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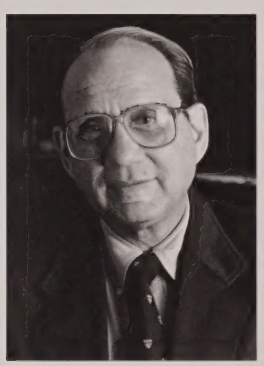
Spaulding Rehabilitation Hospital

Message from the Chief Executive Officer

Each year, nearly 4,000 inpatients experience remarkable recoveries at Spaulding Rehabilitation Hospital. Thousands of other patients receive care in Spaulding's network of neighborhood centers, currently at seven different locations. Several additional centers will open by the end of 1995. Home health care also is expanding. The Spaulding/MGH Home Health Agency provides care in more than 150,000 visits a year in six specialty programs.



Recently, Spaulding has joined with McLean Hospital to open the new Spaulding-McLean Center for patients with psychiatric and physical rehabilitation diagnoses.

Spaulding has a strong commitment to excellence. Our physicians are currently conducting research projects that focus on improving recovery for rehabilitation patients. Many of the projects combine the clinical and research expertise of Spaulding and the MGH. The new Harvard Medical School Division of Physical Medicine and Rehabilitation — sponsored by Spaulding, the MGH, the Brockton-West Roxbury VA Medical Center and Harvard Medical School — is gaining national recognition in rehabilitation education.

In the past year, Spaulding's trustees have focused strategic planning on two external developments that will influence our future. As the health care environment rapidly changes, we have begun to plan a long-term model for the delivery of rehabilitation that will benefit Partners HealthCare System, Inc. and will respond to the changing needs of patients and payors. The construction of the Central Artery also shapes our planning process. Spaulding may need to relocate to accommodate the new roadway. Regardless of the location or configuration of our hospital in the future, I am confident that our committed staff will continue to provide our patients with the finest rehabilitation care.

Manuel J. Lipson, M.D.

Manuel J. Lipson, MD
Chief Executive Officer
Spaulding Rehabilitation Hospital

PATIENT UPDATE

In just 12 minutes, Sylvia Bornstein travels from her home in Newton to her therapy appointments at the Spaulding & Newton-Wellesley Hospital Rehabilitation Center. Because she cannot drive a car, a local transportation company brings her door to door.

Convenient access to therapy services helps Bornstein manage severe pain of diabetic neuropathy in her feet and legs. Last year, her pain was so intense, she could not cook, climb stairs, or walk across a room. When she arrived for her first therapy appointment, Bornstein could barely take three steps as she struggled to maintain her balance with a walker.

After four months of intensive physical therapy, Bornstein is now walking with ease and planning a vacation to an artists' colony in Arizona. She enjoys outings with friends, including a recent visit to the Davis Museum at Wellesley College (right). Although she continues to experience pain, Bornstein has gained better muscle strength, balance, and most important of all, confidence as she moves.

"When I started treatment, the pain was almost unbearable, and it was hard to get motivated for therapy three times a week. I never would have completed the program if I had to travel to Boston."

BOTOX study yields promising results

Generations of Americans have avoided dented food cans, fearing contamination from life-threatening botulinum poison. Ironically, researchers at Spaulding have demonstrated that the same toxin that causes fatal paralysis can also yield substantial therapeutic benefits.

Spaulding physiatrist Joel Stein, MD, has performed pilot studies using small amounts of highly purified botulinum toxin (BOTOX, Allergan Pharmaceuticals) to treat spasticity following stroke. Preliminary results indicate that BOTOX safely and effectively reduces spasticity in both arms and legs, without the side effects seen with other medications.

"Spasticity is an increase in muscle contraction that a person cannot control. Following a stroke, this contraction can interfere with mobility, positioning or other activities," says Stein. "BOTOX injections temporarily relax affected muscles, allowing patients to progress in therapy for walking and other functions. This can lead to sustained functional benefits."

Spaulding provides primary care for the disabled

When Thelma Jones developed debilitating arthritis in the 1980s, she discovered that arranging medical care can be more challenging than caring for her six active sons. Because she never had a primary care physician, Jones sought treatments in a confusing succession of emergency room visits, hospital stays, consultations with specialists and home care treatments.

Jones' disjointed pattern of health care is not unusual. An estimated 35 million people in the United States have a significant, disabling condition. These individuals are susceptible to a wide variety of health problems that lead to frequent medical appointments, hospitalizations and further disability.

Spaulding Rehabilitation Hospital has created a new primary care program to meet the needs of people with disabilities. The program helps patients like Jones avoid many health problems through prevention, early detection and active treatment. "It is reassuring to have all of my medical care at Spaulding. I am glad that my physicians, nurses and therapists can easily meet to discuss my treatment," Jones says.

Construction proceeds for new Cape hospital

The September 1994 groundbreaking for the 60-bed Rehabilitation Hospital of the Cape and Islands (RHCI) heralded a new era in health care for residents of the Cape Cod region. Hockey great Bobby Orr, right, initiated groundbreaking with hospital executives Manuel Lipson, MD, and Susan Glasser. Scheduled to open in the fall of 1995, the new hospital will meet the growing need for advanced rehabilitative and post-acute services in southeastern Massachusetts.

RHCI has contracted Spaulding Rehabilitation Hospital to plan and manage the new hospital. Representatives of Spaulding, MGH, Cape Cod Hospital, Falmouth Hospital and Martha's Vineyard Hospital have been planning RHCI since 1988.

RESEARCH UPDATE

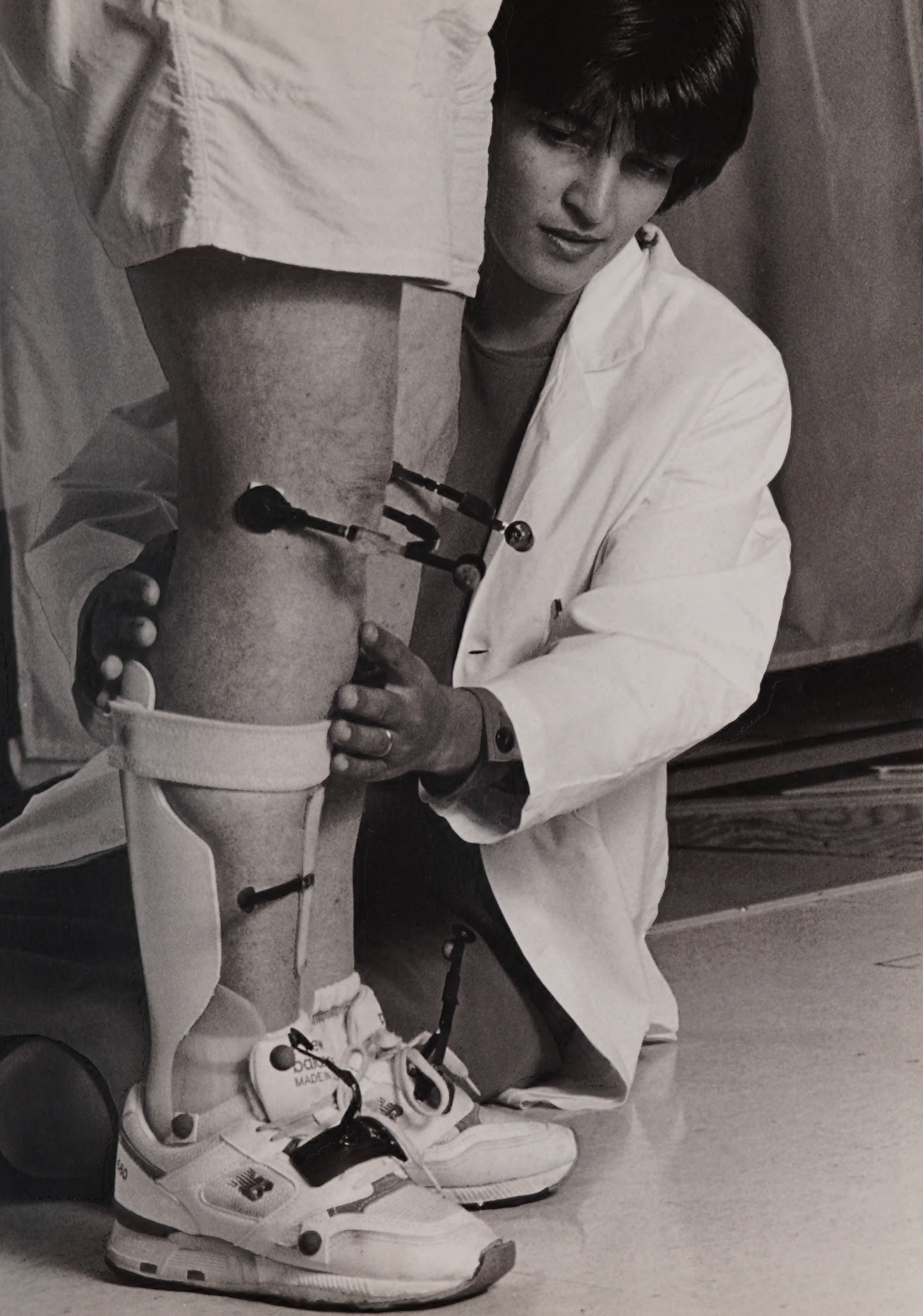
Spaulding physician researches gait patterns of stroke patients

Whether a swagger, a strut, a stroll or a saunter, every individual has a unique walking pattern. In Spaulding's Gait Laboratory, D. Casey Kerrigan, MD, MS, uses sophisticated technologies to study the distinct walking patterns of people with disabilities. By analyzing motion, forces, muscle activity and other processes, Kerrigan can precisely diagnose causes of walking disabilities and evaluate the success of treatments.

Kerrigan recently received a Clinical Investigator Award for her research on rehabilitation of spastic paretic stiff-legged gait, funded by the National Center for Medical Rehabilitation Research of the National Institutes of Health. In this five-year project, she is investigating the effects of stroke on motor control and muscular functions necessary for gait.

"After stroke, many patients have what can be described as 'stiff-legged' gait, when the knee does not bend adequately during walking. Rehabilitation often focuses on stiff-legged gait because walking is arduous for these patients," explains Kerrigan. "We now have the technology to study how underactivity or overactivity in leg muscles causes stiff-legged gait. Once we define the specific causes of this disorder, we can introduce new or more effective treatments."

Kerrigan's gait study is limited to patients with spasticity on one side of the body who have reached a plateau in the recovery progress. "Most patients with stroke have the potential to walk without major difficulties," says Kerrigan. "Our goal is to convert that potential to reality."

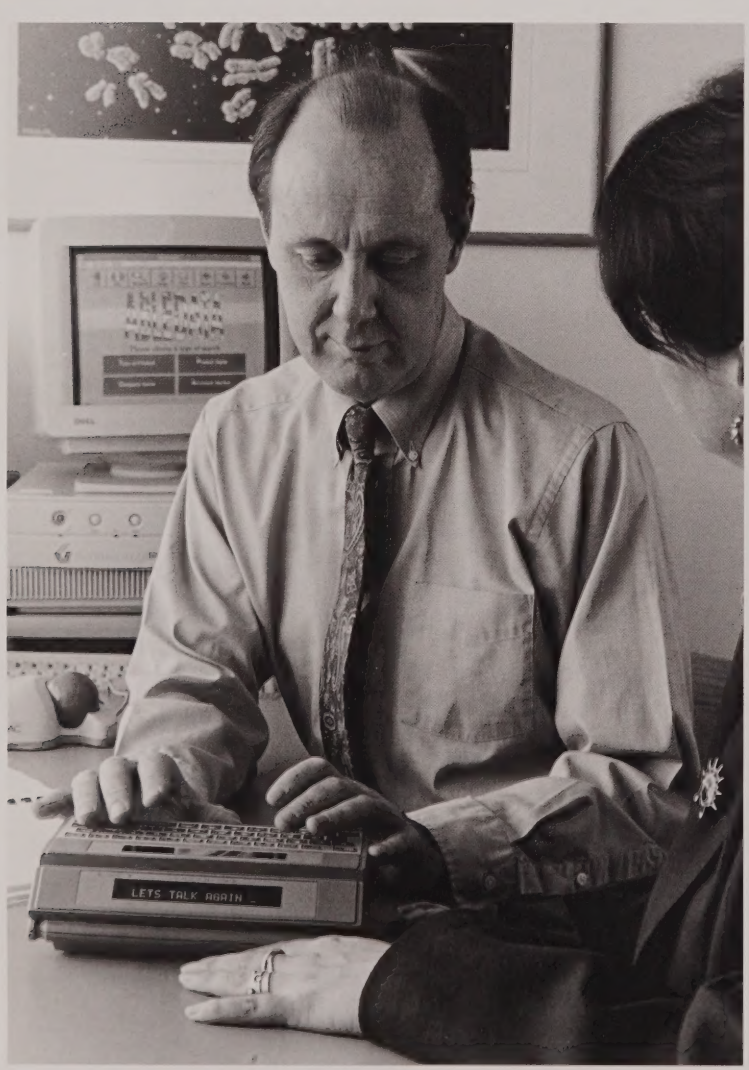


Researching brain activity with MRI

"Physicians have never fully understood the process of stroke recovery," says Jill Kaplan, MD, director of the Spaulding/MGH Stroke Rehabilitation Program. Stroke patients often regain complex physical and cognitive abilities, despite permanent damage to the brain cells that previously controlled the function. Kaplan is now using sophisticated magnetic resonance imaging (MRI) technology to study how brain processes change during stroke recovery.

Kaplan is collaborating with physicians from the MGH to map brain function of patient volunteers while they carry out a simple task, such as tapping a finger. Images from the MRI that reveal increased blood flow help the physicians pinpoint which area of the brain controls specific activities.

"This research will test the theory that brain functions are often 'reorganized' following stroke. MRI enables us to see which areas of the brain compensate for areas that were damaged," says Kaplan. This information could ultimately lead to new treatments that enhance or speed the recovery process.



A recovering stroke patient learns to communicate with a portable voice output device in Spaulding's Assistive Technology Center.

Assistive technology opens new worlds

A wave of the hand turns on a light. A puff of air rolls a wheelchair forward. And a small device "speaks" for a man who lost the ability to communicate following a stroke. Although it often seems like magic, the feats made possible by assistive technologies are no illusion. For the thousands of people with physical, cognitive or language limitations, assistive technologies open a new world in function and independence.

Spaulding Rehabilitation Hospital recently consolidated its extensive technology services in a state-of-the-art Assistive Technology Center (ATEC). The center provides technological solutions to increase the functional abilities of adults and children with disabilities. ATEC is also an active research center, where staff members investigate the effectiveness of assistive technologies in the home or workplace.

"Advances in computer technology and materials science have revolutionized the field of assistive technologies," says Michelle Folkman, MD, BSE, medical director of ATEC. "Many devices to help the disabled emerged from innovations in automobile production, aerospace engineering and other areas of business and industry. These advances resulted in sophisticated augmentative communication systems and robotic prostheses. They also led to environmental control units activated by eye movements or verbal commands."

ATEC offers comprehensive technological services for individuals with a broad range of disabilities. In some cases, technologies help a person who is learning to live with a new disability. In other instances, staff members identify new technologies to help people with chronic or progressive disabling conditions.

In ATEC, a multidisciplinary team of rehabilitation technology professionals evaluates each client's strengths and limitations. Team members then pool their knowledge to recommend commercial or custom-made devices that meet the individual's total needs. The ATEC team consists of a physician trained in engineering, an occupational therapist, a physical therapist, a speech-language pathologist, a neuropsychologist and a rehabilitation technologist (a specialist in adapting equipment for people with disabilities).

"Assistive technologies dramatically improve the productivity and quality of life for many individuals with disabilities," says Manuel J. Lipson, MD, chief executive officer of Spaulding Rehabilitation Hospital.

Neighborhood centers meet local needs

For many patients, convenient access to rehabilitation is crucial to successful treatment. Thousands of patients (like Sylvia Bornstein on page 29) now receive treatment in Spaulding's network of seven neighborhood rehabilitation centers. The hospital established new centers in Stoneham and Brighton in 1994 and is opening several more community-based centers in the near future.

Neighborhood rehabilitation centers enable patients to receive expert care from Spaulding professionals in settings that are close to home. All of the centers in Spaulding's network provide physical therapy,

occupational therapy, speech-language pathology, and physician services. Selected centers also offer specialty programs, including industrial rehabilitation, pain management, hand rehabilitation and pediatric rehabilitation.

When planning new centers, Spaulding collaborates with local hospitals and community representatives to identify rehabilitation programs that best meet local needs.

Introducing Hospital in the Home

Hospital in the Home, a new program of the Spaulding/MGH Home Health Agency, brings the intensive rehabilitation and medical management of a hospital into the comfort and privacy of the patient's home.

The Hospital in the Home team includes physicians, nurses, physical and occupational therapists and other professionals specializing in home care. These professionals closely collaborate with the patient and family members to plan and carry out treatments. The program accommodates patients with diverse medical or rehabilitation needs, including orthopædic problems, stroke, amputation, cardiopulmonary illness and other conditions.

The comprehensive services of Hospital in the Home enable many patients to leave acute or rehabilitation hospitals earlier. The Spaulding/MGH Home Health Agency offers Hospital in the Home in 35 Boston-area communities.

Physician receives physiatry award

Former students use the words creative, compassionate, committed and inspiring to describe Paul J. Corcoran, MD. In the past 30 years, Corcoran has developed a reputation as one of the finest clinicians and educators in the field of Physical Medicine and Rehabilitation (PM&R). But Corcoran's influence on the field of rehabilitation has extended far beyond any classroom or hospital. Through the years, he has pioneered programs that enabled thousands of individuals with disabilities to achieve independent lifestyles.

The American Academy of Physical Medicine and Rehabilitation recently acknowledged Corcoran's significant contributions to the profession by awarding him the Recognition Award for Distinguished Clinicians. The award honors physiatrists who "have achieved distinction through scholarly teaching and outstanding performance in patient care activities." Corcoran currently serves as director of Spaulding's Department of PM&R and interim director of the Harvard Medical School Division of PM&R.

Paul Corcoran, MD, right, received a national award for his contributions as a clinician and educator in rehabilitation.

Boston youth explore health careers

High school students from Boston have opportunities to explore health careers and contribute volunteer services through Spaulding's Volunteers Have the Right Stuff program.

Now in its fifth year, the program promotes educational achievement, self-esteem, community service and cultural diversity. More than 80 percent of the participants are from minority backgrounds and represent a cross-section of Boston schools and communities.

The State Street Foundation recently made a second $30,000 pledge to support the program.

Spaulding financials and statistics

THE SPAULDING REHABILITATION HOSPITAL CORPORATION

Excerpts from audited financial statements (in thousands of dollars).
Year ending September 30, 1994.

	1994	1993
Revenue		
Net patient service revenue	$60,472	$56,829
Other	2,430	1,814
Total operating revenue	**$62,902**	**$58,643**
Expenditures		
Operating expenses		
Salaries and related compensation	$44,529	$43,174
Supplies and other expenses	11,636	10,206
Depreciation	2,605	2,406
Interest	1,597	1,720
Provision for doubtful accounts	1,468	1,164
Total operating expenditures	**61,835**	**58,670**
Surplus (loss) from operations before adjustments	1,067	(27)
Adjustment for third-party payors, estimated settlements, effect of a change in accounting method, loss on bond refinancings and investment income on funded depreciation	895	339
Surplus (loss)	**$1,952**	**$312**

SPAULDING REHABILITATION HOSPITAL: Facts and figures 1994

Beds	284
Employees	1,466
Number of admissions	3,752
Number of outpatient visits	68,229
Fellows	12
Residents	8
Medical staff	204
RNs	158
LPNs	36
Nursing assistants	135
Volunteers	312

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MGH Institute of Health Professions

Message from the President

This has truly been an eventful year for the MGH Institute of Health Professions — increased enrollment, changes in curricula, growing faculty and staff, reorganization of the structure of the MGH and its affiliates and the ongoing evolution of the health care environment have offered exciting challenges and opportunities.

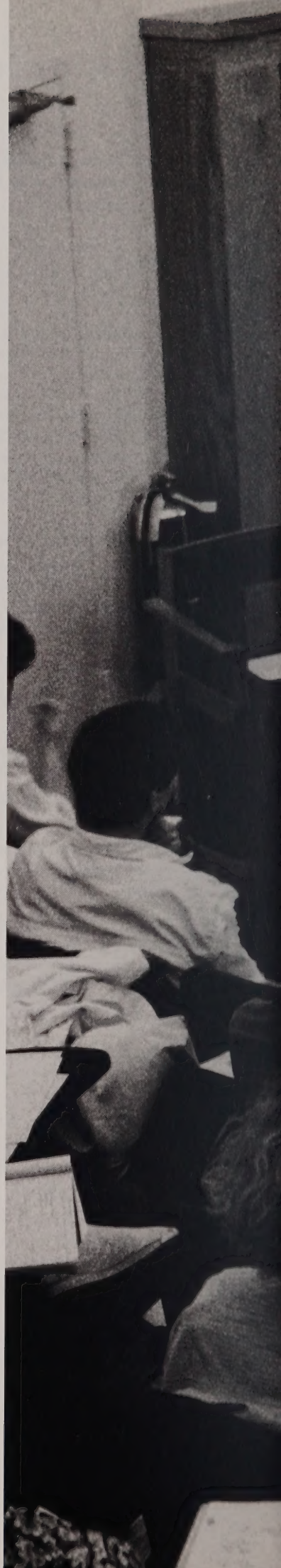
Internally, Patrick E. McCarthy, MCP, who served as president of the IHP since 1988, retired in 1994. During his tenure, he brought the institute to a new era marked by a vast growth in enrollments and faculty, as well as diversity in many areas. In addition, he led the institute through its transition into a new, modern home at 101 Merrimac St., bringing the entire organization under one roof.

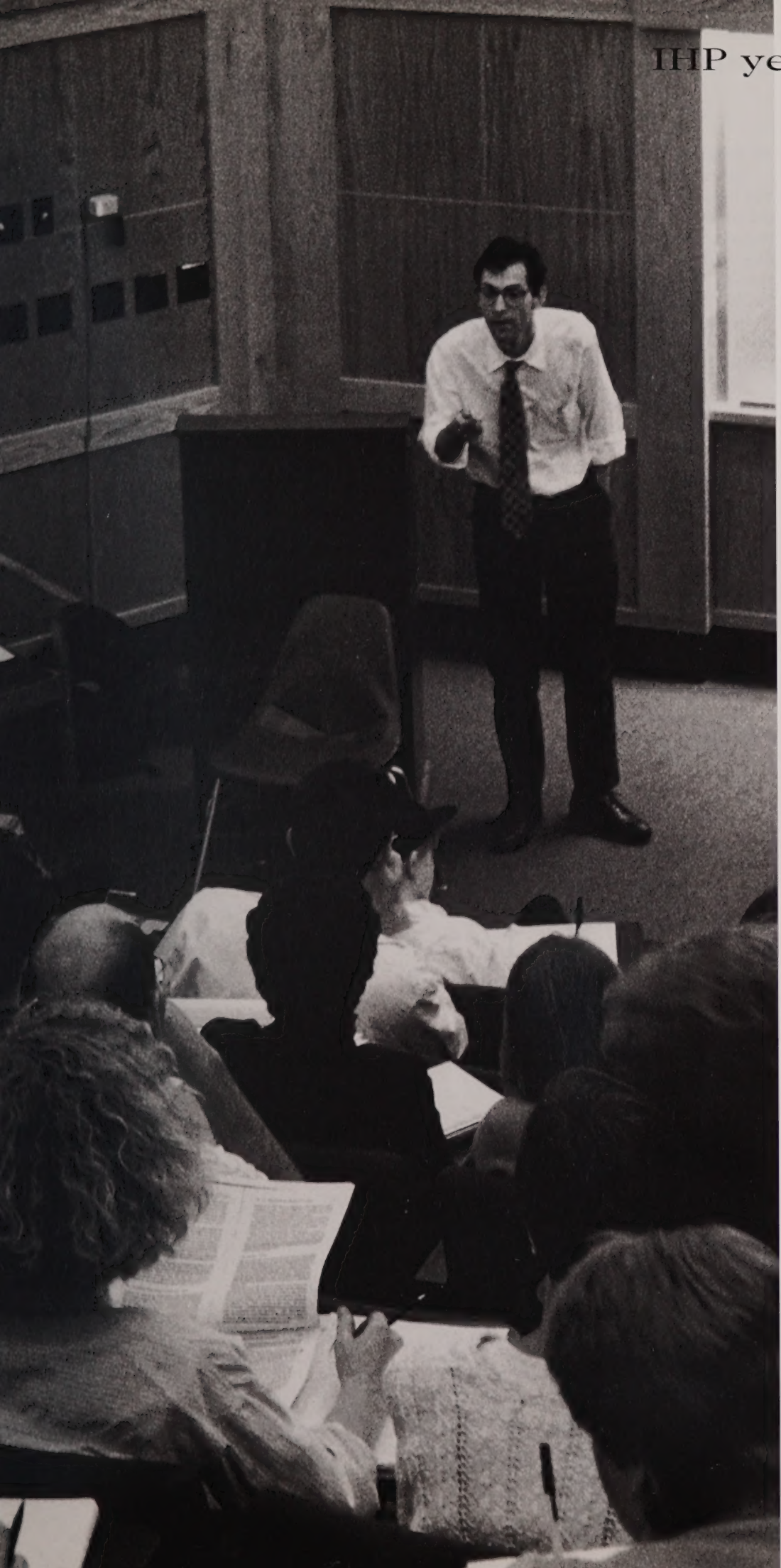
IHP, offering exciting graduate education opportunities in the health care professions, continues to attract outstanding students from around the world, with enrollment now exceeding 500. Applications continue to increase — there are six applicants to every available space in each program — and the academic quality and ability of the students are extraordinary.

Our faculty is also exceptional, consisting of more than 60 scholars, accomplished researchers and writers representing a diversity of backgrounds, academic preparations and geographic origins. Nearly all are doctorally prepared, and many are experienced practicing clinicians, equipped to integrate theory and practice into their teaching.

As the health care environment has changed, so has the focus of our instruction. We have shifted training to more primary care settings and place more emphasis on clinical and outcomes research. As the true educational arm of Partners HealthCare System, Inc. and a major center for education and research in the country, the IHP will continue be a leader in developing responsive and creative approaches to the changing health care world.

Maureen Groër, RN, PhD, FAAN
President





Student life enhanced at the IHP

Evolving and improving to keep abreast of the needs of students and faculty is an important goal of the IHP. From expanded curricula to new and larger facilities, the face of the IHP saw many changes in 1994.

The Ruth Sleeper Learning Center, developed in 1992, relocated this year to new space at 101 Merrimac St. Through funds raised from the graduates of the former MGH School of Nursing and a Fuld Foundation grant, state-of-the-art computers and audiovisual equipment were integrated into the new center, providing a variety of services to students.

"Now students can perform a complete bibliographical search, write a term paper or create a physiological simulation of a disease on CD-ROM," says Maureen Groër, PhD, president. "The Learning Center has really enhanced student life at the IHP."

Serving as a national model, the IHP's newly revised curriculum for the Graduate Program in Nursing now offers tracks that enable students to become adult, pediatric or family nurse practitioners, and also offers a post-master's degree program of advanced study in adult primary care.

In addition to the existing advanced curriculum for practicing physical therapists, the Graduate Program in Physical Therapy implemented a new curriculum to prepare entry-level physical therapists. Eight new physical therapy faculty will manage this new program, which will admit its first students in July 1995.

IHP students and faculty excel

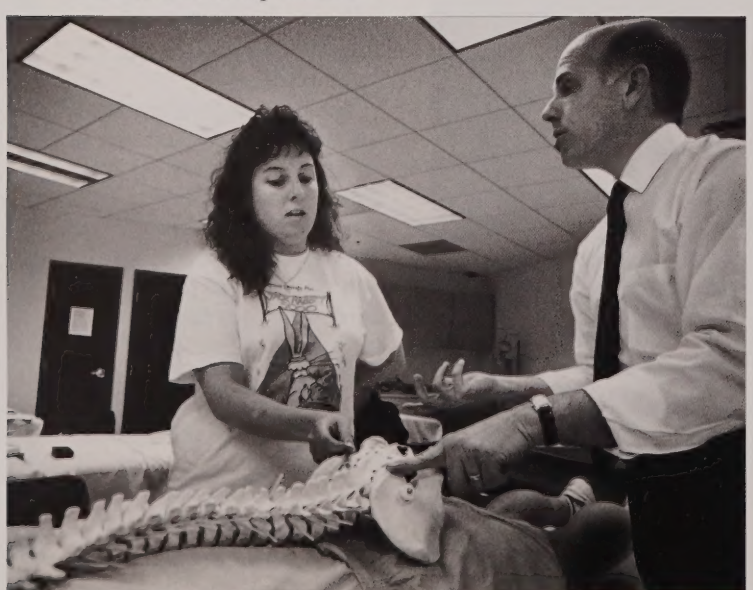
IHP has been known to attract exceptional students and faculty from around the world, and this year was no exception. From acknowledgements by professional organizations to published articles and research, the institute's students and faculty excelled in 1994.

Gretchen Johnson, a student in the Graduate Program in Communication Sciences and Disorders, was honored by the National Student Speech-Language-Hearing Association for excellence in the conduct of original research. Mary M. McGehee, RD, a student in the Graduate Program in Dietetics, was one of two winners of the American Dietetic Association (ADA) Nutrition Research Practice Group's Graduate Student Paper Competition. She presented her paper at the ADA's annual meeting in October.

Mary Carey, PhD, RD, professor and program director of the Graduate Program in Dietetics, became the director of the Geriatric Nutrition module of the Harvard Upper New England Geriatric Education Center. The center is designed to improve educational opportunities in geriatrics for health professionals in New England.

Maureen Groër, RN, PhD, was welcomed as a fellow of the American Academy of Nursing. The American Association of Community Nursing Health Educators elected Karen Wolf, PhD, as its Northeast representative. Maureen Abate, PhD, and Patrice Nicholas, DNSc, RN, wrote articles that were published in nursing research journals, and Inge Corless, PhD, RN, Raphella Sohier, PhD, RN, and Linda Andrist, PhD, RNC, presented papers at national and international conferences. John Locke, PhD, professor and program director of the Graduate Program in Communication Sciences and Disorders, authored an article on children's language development published in the fall issue of *American Scientist.*

Several faculty members from the Graduate Program in Physical Therapy received funding from the National Institute on Aging and the Arthritis Foundation to pursue clinical research on the elderly. David Krebs, PhD, and Kathy Gill-Body are studying the efficacy of rehabilitation of patients with vestibular dysfunction. In addition, Bette Ann Harris and Alan M. Jette, PhD, are investigating exercise's effect on improving strength, balance and function in the elderly.



A new beginning for IHP graduates

"What a time to be in the health professions!" exclaimed Samuel O. Thier, MD, MGH president, in his address to the 14th graduating class of the IHP. Seventy-three students graduated on June 17, 1994, the largest graduating class in the IHP's history. Among those receiving master's degrees, five received degrees in dietetics, 33 in nursing, 10 in physical therapy and 26 in speech-language pathology.

Four awards for excellence were presented to faculty and students. James M. Hodgson, PhD, from the Communication Sciences Program received the Award for Excellence in Teaching. The Excellence in Clinical Nursing Practice Award was presented to John A. Nunes, RN, MSN. Dietetics graduate Mary M. Rybicki, RD, MS, received the Louise Hatch Award, and the Mary Mankin Prize in physical therapy was presented to Michelle Betti Gardner, PT, MS.

Patrick E. McCarthy, MCP, retiring president of the IHP, was also honored at the ceremony for his accomplishments during his six-year tenure. In his final address to students, McCarthy said, "These students are intelligent, caring human beings with a solid idea of where they are and where they want to go." He added, "We are proud to have enrolled them, to have taken part in their education and now to join with them in a celebration of their graduation."

Daniel Dyrek, MS, PT, demonstrates examination techniques to a physical therapy student.

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Faculty member John Deckro, MS, RNC, instructs nursing students using an anatomical model.

Ways to give

Private support has allowed The Massachusetts General Hospital — comprising the General Hospital, McLean Hospital, Spaulding Rehabilitation Hospital and the MGH Institute of Health Professions — to build upon its commitment as an international resource, leading the way in patient care, medical research and education. The generosity of those who give to the MGH and its affiliates makes a crucial difference in the ability to fulfill their mission.

Types of gifts

Unrestricted
Unrestricted gifts are directed by the trustees to those areas in which the need is most pressing.

Restricted gifts
Donations can be made to a particular specialty or program to support the donor's personal interest.

Endowed funds

A minimum contribution of $25,000, made through either a lifetime gift or by bequest, establishes an endowed named fund. The principal is preserved, and the income supports the activities of the fund.

Capital donations

Capital gifts for building construction or renovation provide caregivers and researchers with efficient facilities to support their efforts.

Naming opportunities

Donors are encouraged to consider having their names recognized through a naming opportunity. Commitments starting at $25,000 can be used to name a room or create a named fund. Contributions of $100,000 and above can support a department fellowship, provide investigator funding, support educational programs or name a major inpatient or outpatient area.

Assets to give

Cash
A gift of cash is the simplest and most immediate way to give. Cash gifts may be pledged over a period of five years and are fully deductible up to 50 percent of the donor's adjusted gross income.

Appreciated securities
A gift of long-term appreciated securities is exempt from capital gains taxes, currently at a maximum rate of 28 percent. In most cases, a donor can claim a charitable income tax deduction equal to the full fair market value of the appreciated securities. The gift is deductible up to 30 percent of a donor's adjusted gross income.

Real estate
In some cases property can be given outright, and the donor receives a charitable income tax deduction for the fair market value of the property. Gifts of real estate also can be used to fund a life income arrangement.

Life income gifts

Life income arrangements vary, but most options offer the following financial benefits:

- An income for life to the donor and a second beneficiary
- A charitable income tax deduction
- A reduction or avoidance of capital gains taxes
- Savings on estate and gift taxes
- A higher rate of return than many current investments
- Professional investment management

Some life income vehicles

Charitable gift annuities
Charitable gift annuities provide the donor with a fixed, high rate of return. Rates are highest for older donors.

Pooled income funds
Pooled income funds work like mutual funds. Gifts are pooled together, and each donor receives a variable rate of return, currently 7.2 percent. A donor completely avoids capital gains taxes when making a gift to a pooled income fund. The MGH and its affiliates currently offer three pooled income funds, each with different investment objectives.

Charitable remainder trusts
Charitable remainder trusts are personalized management plans. Donors select a payout rate, usually 5 to 6 percent, that pays an annual income to the donor. The rate is either a fixed amount of the trust's assets (annuity trust) or is revalued annually based on the principal in the trust that year (unitrust). Trusts are generally established for $100,000 or more.

Bequests
For many donors, a gift made through their will is the best way to make a substantial contribution. Donors can leave a specific dollar amount or a percentage of their estate. Through a bequest, a donor can make a gift without depleting current assets and eliminate or reduce federal estate taxes.

For more information
For additional information about making a planned gift, please call the MGH Planned Giving Office at (617) 724-6408.

Established in 1811 by some of America's founding fathers and most respected physicians, the Massachusetts General Hospital (the MGH) is the third oldest general hospital in the United States and the oldest in New England. It is the first and largest teaching hospital affiliated with Harvard Medical School. In addition, the MGH operates the largest hospital-based research program in the United States.

The affiliates of The Massachusetts General Hospital include the General Hospital, McLean Hospital, Spaulding Rehabilitation Hospital and the MGH Institute of Health Professions. The MGH is a founding member of Partners HealthCare System, Inc.

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President
The Massachusetts General Hospital and Partners HealthCare System, Inc.

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Chief Executive Officer
The General Hospital

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Psychiatrist-in-Chief
McLean Hospital

MANUEL J. LIPSON, MD
Chief Executive Officer
Spaulding Rehabilitation Hospital

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The Massachusetts General Hospital and Brigham and Women's Hospital are founding members of Partners HealthCare System, Inc.

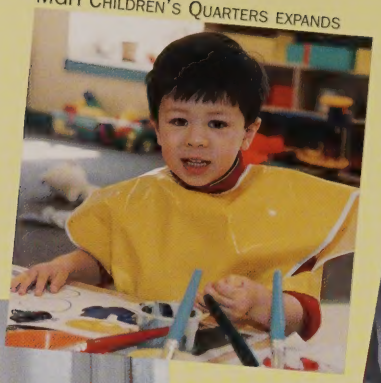
MASSACHUSETTS
GENERAL HOSPITAL

Annual Report

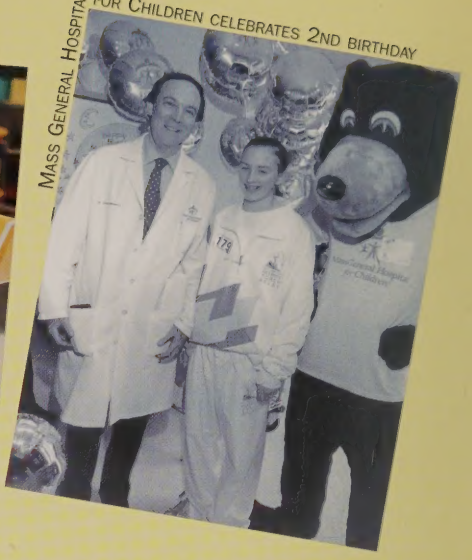
2002

Julian Bond visits MGH

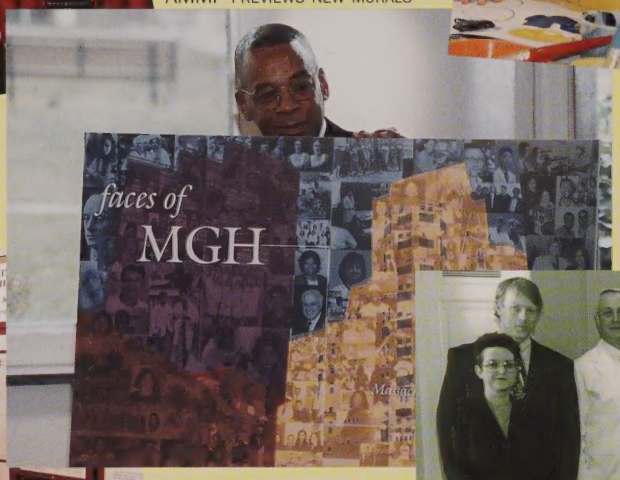
MGH Children's Quarters expands



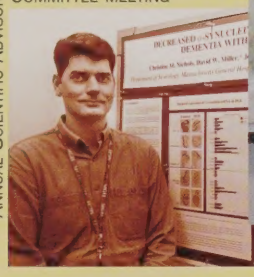
Mass General Hospital for Children celebrates 2nd birthday



AMMP previews new murals



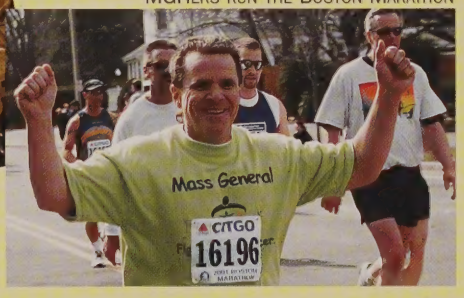
Annual Scientific Advisory Committee meeting



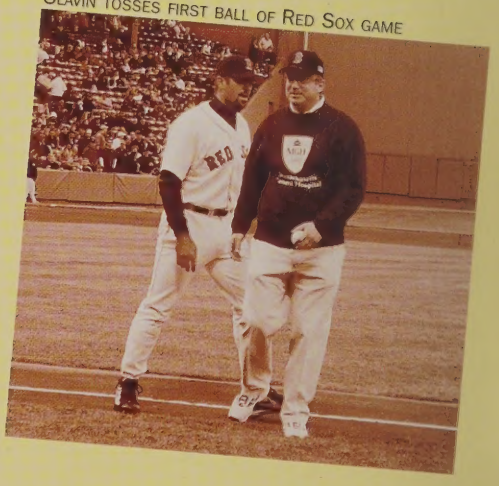
United Way has most successful MGH campaign ever

Pam Ellis Secretarial Award

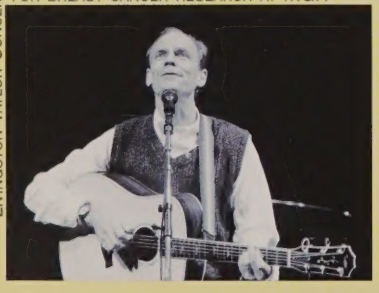
MGHers run the Boston Marathon



Slavin tosses first ball of Red Sox game



Livingston Taylor Concert for breast cancer research at MGH



National Blood Donor Awareness Month

Jane Claflin awarded Trustees Medal

East Boston High School students visit MGH

Cover: The MGH Operating Room of the Future (See story Page 8). Photo by Sam Riley, MGH Photo Lab.

A message from Peter L. Slavin, MD, president of the MGH

IN THE TWO DECADES I have been associated with the MGH, I have seen time and again a universal commitment to provide patients not only the highest quality treatments, but also to care for them with dignity, respect and compassion. I am honored to be part of this extraordinary institution, and I am particularly humbled to have the opportunity to serve as its president, a position I assumed in January 2003.

In this new role, I continue to witness a deep and constant resolve to strengthen the MGH as a vital health care resource now and in the years to come. We are tapping into this resolve as we embark on a comprehensive strategic planning process that will help us develop a thoughtful roadmap for our future.

Looking ahead, one of our greatest hurdles is a shortage of space on our urban campus. An overarching issue in our planning, therefore, is how and where we should grow to enable us to serve patients, remaining mindful of both the evolving nature of medicine and our long-term viability. We also are confronting other challenges and questions. As we grow, for example, how can we enhance the quality and safety of the care we deliver? How do we ensure that employees feel motivated and satisfied with their worklife? How do we make the most efficient use of our campus facilities? What clinical innovations should we pursue?

The questions are many, the challenges great, the task daunting. To succeed, we will need the right blend of energy, determination, open-mindedness, flexibility and creativity. And I know the people of MGH have these qualities in abundance.

We also have taken some significant steps in the past few years to help meet our more immediate needs. Increased space for ambulatory care is one such need. In late 2004, we will move into a brand new, 300,000-square-foot, state-of-the-art ambulatory care building, now under construction. The new facility will be called the Yawkey Center for Outpatient Care in recognition of a generous $25 million commitment from the Yawkey Foundation. The late Jean Yawkey, who with her husband, Tom, owned the Boston Red Sox for many years, received her medical care at the MGH and was a longtime supporter of the hospital.

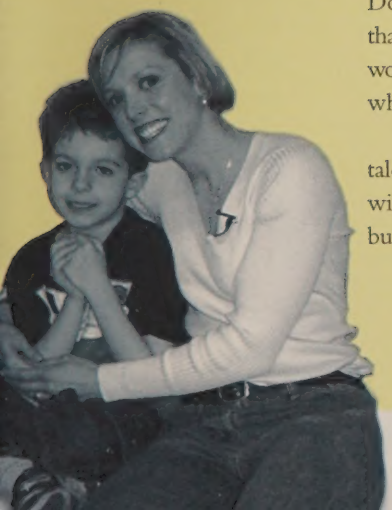
Finding more space to house our rapidly expanding research program is another pressing need. We are looking forward to the day in 2005 when we will inaugurate a new research facility at Charles River Plaza, adjacent to the hospital. This specially designed building will enable us to foster interdisciplinary programs in such areas as genetics and genomics, regenerative medicine and computational biology, disciplines that offer revolutionary opportunities to save lives.

Steering the MGH into the years ahead successfully will require the collective efforts of the extraordinary people who work here. Similarly, our ability to succeed will depend on the guidance and wisdom of our dedicated and engaged trustees and honorary trustees. In addition, we have enlarged our hospital family this year with the establishment of the MGH President's Council, a group of highly talented business and community leaders whose advice and involvement have already proved valuable.

The extended MGH family also encompasses the many grateful patients, family members and friends who, through their philanthropic support, have recognized that the MGH is a health care treasure. We are grateful for recent leadership gifts from the Yawkey Foundation, Avon Foundation, the Blum family, the Doris Duke Charitable Foundation, the Gosnell family and Hansjorg Wyss. And we continue to be thankful for the many other gifts, large and small, from people who have benefited from and appreciate the work of the hospital. This past year, we also were fortunate to count among our donors thousands of MGHers who contributed as part of the Kresge Foundation's $2 million challenge to the hospital.

The MGH is indeed a remarkable place, with a lengthy list of accomplishments made possible by talented and committed people who make this hospital what it is. And it is the people of the MGH who will ensure that this legacy of achievement continues into the future. The road ahead is challenging, but it is also bright and promising. We drive forward enthusiastically.

Peter L. Slavin



DESPITE ILLNESS, JENNIFER ROBERTS, RN, RUNS THE BOSTON MARATHON TO SUPPORT THE MGH

The foundation of patient care at the MGH reaches back to 1821 when the first patient was treated at the hospital – launching the beginning of more than 180 years of medical progress. Since that time, the MGH has earned a worldwide reputation for leading the way in providing exceptional patient care, conducting cutting-edge research and teaching future clinicians the art and science of medical care and treatment.

This legacy remains at the heart of the MGH, a driving force for the future. Dedication and compassion can be found at every level of this hospital – from the patients and families we serve, to the people who work diligently to maintain hospital operations, to the places where patient care is conducted, to the progress made in medical breakthroughs. The following pages offer just a glimpse into the life of this institution during the year 2002.

Patients – The heart of the MGH

1 From Russia with love

Valentine's Day is often considered the "holiday of the heart," but this special occasion had a different meaning for a young patient at the MGH. Fourteen-year-old Ekaterina "Katya" Grigorieva and her mother, Masha, came to Boston from Russia in February 2002 to seek the help of MassGeneral Hospital for Children in treating Katya's congenital heart defect.

At the age of 7, Katya had been diagnosed with atrial septal defect, a hole in the heart wall that separates the left and right atrium, allowing deoxygenated blood from the body to mix with oxygenated blood from the lungs. If not repaired, the defect eventually can cause heart failure, heart rhythm problems or high blood pressure in the lungs.

Unable to get appropriate treatment in her homeland, Katya and her mother made the long journey from Russia to Boston Feb. 10, 2002, seeking the help of MGH experts who could perform a noninvasive procedure that would stop Katya's deteriorating condition.

A device was implanted that would permanently block the hole in the septum wall. Katya was discharged from the MGH Feb. 14 – a significant occasion not only because of Valentine's Day but also because Katya no longer has to worry about the health of her heart.

2 Family travels halfway around the world for MGH care

Edmond and June Lococo know firsthand how difficult it is to see a child in pain and to be unable to help him. When their 2½-year-old son, Alfio, was diagnosed with a tumor in his bladder in 2001, the family not only had to care for a very sick child, but also had to maneuver through a difficult health care system in their home city of Beijing, China.

The Lococos took Alfio to a local children's hospital when he was having difficulty urinating. He was diagnosed with a tumor on his bladder. If the tumor was cancerous, they were told, Alfio would have just a 60 percent chance of surviving if treated in Beijing.

Not satisfied with this prognosis, the Lococo family took Alfio to a hospital in Hong Kong, where the doctors believed that the tumor was snarled up against his bladder and urethra, which would require a radical surgery to remove the tumor. The doctors said that Alfio would suffer a major loss of function – both of his bladder and his prostate, so they recommended chemotherapy without the surgery.

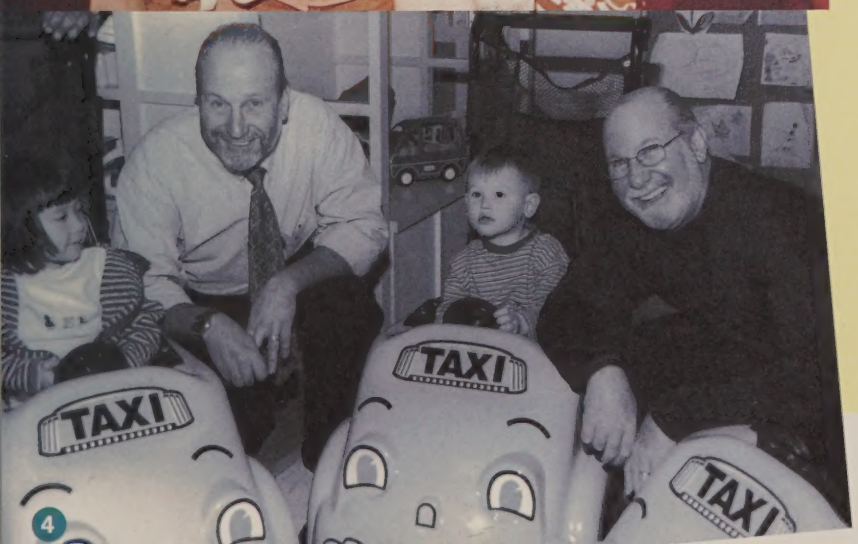
Still not ready to accept such a poor prediction for their son's future, the family turned its sights across the globe to the MGH. Edmond Lococo, who is from upstate New York, researched many hospitals before finding hope at MassGeneral Hospital for Children.

The family packed up its belongings within 48 hours and moved to Boston Nov. 1. Within three days, Alfio underwent open-bladder surgery to remove the rhabdomyosarcoma, a rare soft-tissue tumor. Fortunately, the surgical team was able to remove the tumor completely and safely, leaving Alfio with normal function of his bladder, prostate and urethra.

Although the MGH team removed the entire tumor, a follow-up test showed some cancerous cells remained in Alfio's bladder, requiring radiation treatment. Fortunately, the Lococo family had chosen one of only two hospitals worldwide that offer on-site proton beam therapy, a specialized form of precisely targeted radiation. Alfio was the first pediatric patient to be treated at the MGH center, which opened in November 2001.

Proton therapy was a particularly good option for Alfio because it would minimize damage to his pelvis and the surrounding healthy tissue. Because his muscles and tissues still are developing, minimizing the side effects was crucial. So far, follow-up evaluations have shown no tumor growth.

"We went through an extremely dark period, the darkest time of my life, in Beijing," says Lococo. "It is bad enough to find out that your child has a life-threatening disease, but then we found out that the place where we lived couldn't treat him. We were told he had a 60 percent chance of surviving, and here at the MGH, we were told he had better than a 90 percent chance. We went from a coin toss on the fate of my son's life to almost certain success. I have complete confidence in the doctors here. His prognosis is very good, but it is good only because we came here."



3 ... and still growing: MGH Vincent IVF celebrates 10th birthday

MGH-Vincent Reproductive Medicine and In Vitro Fertilization (IVF) held its first family reunion to celebrate its 10th birthday. More than 500 people – parents, grandparents and children – attended the event, held under the Bulfinch tent Sept. 29, 2002. The celebration included activities such as face painting, a magic show and a visit from Mother Goose and other favorite characters.

Thomas L. Toth, MD, medical director of the Vincent IVF Unit, and a number of physicians, nurses and staff were on hand to welcome back many of the families who have received infertility treatment at the MGH.

4 Anyone need a taxi?

There will be no more waiting for a taxicab at MassGeneral Hospital for Children thanks to a donation from Jordan's Furniture. And what do taxis have to do with furniture? The furniture retail company, known for its generosity to local charities, donated a fleet of 24 yellow, taxi-shaped push carts to the hospital to make transport between tests and appointments more enjoyable for young patients.

1 Changes in leadership for MGH, MGPO and Partners

A four-way leadership change took place at midnight Dec. 31, 2002, marking major milestones for the MGH, the Massachusetts General Physicians Organization (MGPO) and Partners HealthCare.

James J. Mongan, MD, who had served as president of the MGH for six years, took the reigns as president and chief executive officer of Partners HealthCare. Mongan succeeded Samuel O. Thier, MD, who since 1994 had led Partners first as president, then as CEO and president. Peter L. Slavin, MD, who had served as the chairman and CEO of the MGPO since 1999, became president of the MGH, succeeding Mongan. David F. Torchiana, MD, who had served as chief of MGH Cardiac Surgery since 1999, succeeded Slavin as chairman and CEO of the hospital's 1,700-member multispecialty physician group practice.

Left to right, Mongan, Slavin, Thier and Torchiana

2 MGH's oldest patient gets clean bill of health

The MGH's oldest and dearest patient had a checkup Jan. 6 and is reported to be doing well. Padihershef, a 2,500-year-old mummy who calls the MGH Ether Dome home, underwent a rare cleaning and restoration procedure by a conservator and a team of other professionals trained in restoring ancient artifacts.

Padi – as he is affectionately called by MGHers – was removed from his coffin to have his linens cleaned and repaired and salt deposits removed from his face – all under the watchful eyes of local reporters. Both Padi and his coffin then were transported to the George Walter Vincent Smith Art Museum in Springfield, Mass., where he has been on display.

Padi was given to the hospital in 1823 as a gift from Dutch merchant Jacob Van Lennep. In the early 1960s, the hieroglyphics on Padi's coffin were finally deciphered to reveal his name, which means "gift of the god Hershef." It is believed that he was an unmarried stonecutter from the City of the Dead in Thebes.

3 Nursing at MGH: Simply the best

It is a simple slogan – Nursing at MGH: Simply the Best – but it speaks volumes about the exceptional care that is provided at the MGH by the nursing staff. That slogan has been seen in a multi-media advertising and image campaign that was launched in May 2002.

The campaign, which features images of individual and teams of MGH nurses from throughout the hospital was seen in television, radio, print and *www.Boston.com* advertisements as well as the Mobile Media truck *(shown at right)*.

4 Singing and swinging at Fenway

Jennifer Jackson, administrative director for MGH Radiation Oncology, had the opportunity to sing the national anthem to a stadium full of cheering fans at the Sept. 18, 2002 Red Sox vs. Cleveland Indians game. It was the last game of the season that the MGH PERKS program had participated in, with close to 600 MGHers and Partners employees packing the stands at Fenway Park.

5 MGHers give inspirational gift to Guam

In the true spirit of the holiday season, a group of MGHers gave an important gift days before Christmas when they were deployed to a region of the world that was struck by a super-typhoon. The employees activated to provide disaster relief were part of the International Medical Surgical Response Team (IMSuRT).

On Dec. 8, 2002, the Pacific island of Guam was nearly destroyed. With sustained winds of more than 150 mph, Typhoon Pongsana paralyzed the small island, wiped out much of its communications and water resources and heavily damaged Guam Memorial Hospital. After declaring the island a federal disaster area, President George W. Bush activated the federal disaster response team – including the Boston team.

The MGH-based team is supervised by Susan Briggs, MD, *(at right in photo)*, an MGH surgeon and supervising medical officer of the federal disaster teams. Briggs activated a team of 21 nurses and respiratory therapists, a physician and several paramedics – mostly MGHers – from the emergency response team, which is part of the IMSuRT and the Metro Boston Disaster Medical Assistance Team (DMAT). Developed and directed by Briggs, IMSuRT is sponsored by the MGH.

2002 AT A GLANCE

- Civil rights leader Julian Bond, PhD, speaks at MGH.
- MGH Children's Quarters expands to include a new kindergarten program.
- MassGeneral Hospital for Children celebrates its second birthday.
- Association of Multicultural Members of Partners (AMMP) honors legacy of Martin Luther King Jr.; "Faces of MGH" murals previewed.
- East Boston High School students visit MGH for annual Job Shadow Day.
- Two national leaders of the quality and safety movement in health care visit the MGH.
- MGHer Ann Quinn receives Pam Ellis Memorial Secretarial Award.
- Many MGH programs benefit from the efforts of hospital employees running in the Boston Marathon.
- Peter L. Slavin, MD, president of the MGH, throws the first pitch at a Red Sox game.
- Folksinger Livingston Taylor gives concert to benefit breast cancer research at MGH.
- MGH Honorary Trustee Jane Claflin receives Trustees Medal.
- The MGH United Way campaign celebrates most successful campaign in the hospital's history.
- After battling a debilitating neurological condition, Jennifer Roberts, RN, runs the Boston Marathon.
- MGH study in *Journal of Neurophysiology* examines musical pitch perception.
- Daniel I. Rosenthal, MD, of MGH Radiology, selected as winner of the 2002 Nathaniel Bowditch Award.
- MGH Institute for Health Policy publishes study examining data withholding in academic genetics.
- Gloria Niles and Jyl Baker-Dedier, RN, receive the 2002 Durante Award for Exemplary Care and Service with Cancer Patients.
- MGH Volunteer Recognition Day marks 18,336 hours of volunteer service.
- MGH support staff honored during Operations Support Staff Day.

1 Celebrating 60 years of giving the gift of life

April 2002 marked a major milestone for the MGH Blood Transfusion Service (BTS) – its 60th anniversary. The opening of the BTS in 1942 under the direction of Lamar Soutter, MD, represented several "firsts." It was the first hospital-based blood bank in Boston; Soutter was the first director; and he was the hospital's first official blood donor. Soutter was an early proponent of storing plasma in preparation for a possible civilian disaster.

In November 1942, the MGH Blood Bank, as it was then called, helped save many lives by supplying blood products to the 114 people who were rushed to the MGH following the infamous Cocoanut Grove nightclub fire in Boston. To ensure the availability of blood and plasma, Soutter instituted an aggressive campaign to recruit donors – an action that proved visionary. During the first month of operation, the BTS performed 150 transfusions. Today, the BTS handles more than 5,000 transfusions each month. To help meet the continuous need for blood, donor recruitment has become a vital part of the BTS.

2 New outpatient center to recognize Yawkey family

MGH history was made in 2002 when John L. Harrington, executive director of the Yawkey Foundation, announced a $25 million commitment to support the hospital's efforts to increase access to vital outpatient care and services for patients throughout New England. The gift, which will be distributed over eight years, represents the largest contribution ever made to the MGH. To recognize the generosity of the foundation, the MGH will name its new outpatient facility, currently under construction, the Yawkey Center for Outpatient Care.

Jean R. Yawkey, who with her husband, Tom, were longtime owners of the Boston Red Sox, received her medical care at the MGH. Mrs. Yawkey, who died in 1992, was a strong advocate of the work of the hospital and supported many of its programs and initiatives. The $25 million commitment will enhance access to many of the services that were important to Mrs. Yawkey, including women's health, pediatrics, cancer and cardiology. Outpatient programs in these specialties, as well as musculoskeletal care, will be located in the new center. When completed in 2004, the center will be the largest and most comprehensive ambulatory care resource in New England.

3 Martinos Center dedicates new imaging equipment

Two state-of-the-art imaging units – both one of a kind – were dedicated in 2002 by the Athinoula A. Martinos Center – a collaboration among the MGH, Massachusetts Institute of Technology and Harvard Medical School. The center is located at the MGH NMR Center at Charlestown Navy Yard. A powerful 7-Tesla MRI system and a 306-channel magnetoencephalographic (MEG) system will give Martinos Center researchers an unprecedented ability to study the brain's normal activity and how that activity is disturbed by addictive behaviors and neurologic or psychiatric illnesses.

The 7-Tesla system is one of only three such powerful MRI units in the world and the first that can be used for patient care. The combination of the new and existing MRI equipment, MEG and other imaging technologies will give Martinos Center researchers a distinctive ability to analyze the complex interaction of systems within the brain.

4 MGH physicians assist surgery at South Pole

MGH clinicians are accustomed to treating patients from around the world, but these patients usually come to the MGH. In 2002, however, two MGH physicians helped treat a patient at the South Pole using the art of telemedicine. Bertram Zarins, MD, of MGH Orthopædics, and Vicki Modest, MD, of MGH Anesthesiology and Critical Care, helped a physician at the Amundsen-Scott South Pole Station perform surgery on a meteorologist who injured his knee in a fall.

Because of the extreme winter conditions in Antarctica, the patient, Dar Gibson, could not have been evacuated for four months. Using a telemedicine video link, Modest was able to guide South Pole physician Timothy Pollard, MD, through the placement of a spinal anesthetic. This was followed by Zarins' guidance in suturing the patient's damaged tendon.

Communication links between the United States and Antarctica have been used before to assist with medical procedures, but this is the first time in the South Pole program's nearly 50-year history that telemedicine was used for surgery.

2002 AT A GLANCE

- The MGH Institute of Health Professions holds its 22nd commencement.
- MGH participates in Take Our Children to Work Day.
- The MGH presents its highest award for research – the Warren Triennial Prize – to the leaders of the two scientific teams that jointly published a first draft of the human genome.
- MGH Chelsea HealthCare Center hosts annual "Safety on Wheels" event.
- The MGH launches a hospitalwide fundraising campaign called the Kresge Challenge to raise money for the first phase of construction of the Yawkey Center for Outpatient Care.
- MGH nurse celebrates a special Mother's Day with her sons, both of whom were saved by the MGH.
- Patients, family and friends gather for the Bone Marrow Transplant Patient and Family Reunion.
- Singer and actress Julie Andrews helps unveil the Voice Restoration Subsequent to Vocal Fold Scarring project at the MGH, in collaboration with the Mass. Eye and Ear Infirmary.
- MGHers enjoy annual summer picnic.
- MassGeneral Hospital for Children celebrates Children and HealthCare Week.
- MGH volunteers and employees bring comfort to patients with their hand-made quilts.
- Rare medical books donated to the MGH Archives.
- James P. Timilty Middle School students display science fair projects.
- MGH study discovers method of improving failing heart cell function.
- MGHer Samuel Roberts named a 2002 YMCA Black Achiever.
- Community seniors are treated to a cooking demonstration as part of the Senior Supper Club.
- MGH employees participate in the Spanish for Health Care Program.
- MGH Senior HealthWISE program launched.
- MGH Chelsea HealthCare Center helps sponsor Latin American Festival.
- Jerrold F. Rosenbaum, MD, selected as new chief of Psychiatry.

1 A room with a view to the future

While surgery without incisions is still largely the subject of science fiction, the MGH is stepping closer to such surgical advances with the introduction of an "operating room of the future." A collaboration between MGH clinicians and members of the Center for Integration of Medicine and Innovative Technology (CIMIT), the OR of the future is a state-of-the-art facility that is being used to test newly approved surgical and information system technologies. After two years of planning, the room opened for use at the end of August 2002.

Unlike traditional ORs, the OR of the future has no cords or wires strewn across the floor, limited massive machinery and well-organized and compact electronic devices. The room also can handle up to three patients at a time – all in different stages of OR care – reducing precious time used moving patients from pre-surgical preparation to surgery to recovery.

A large screen is mounted on the wall to give the medical staff and observers clear views of the surgery. All room operations – such as equipment monitors, lighting and environment controls – are directed from central locations so that surgeons and nurses can access them more easily.

The MGH/CIMIT team is comprised of physicians, nurses, biomedical engineers, OR administrators, information systems experts, industry partners and architects, collaboratively working toward the same goal: better and more efficient patient care.

2 MGH patient saved by artificial liver machine

Four days before he was to celebrate his 49th birthday, Kevin Fitzmaurice was brought to the MGH Emergency Department with acute liver failure. Usually patients with this condition cannot survive without liver transplantation. The process for getting on the transplant list and then waiting can take weeks or months – if an organ becomes available at all.

While in a coma, Fitzmaurice was evaluated and treated by a team of dedicated physicians and nurses. Fitzmaurice was enrolled as a clinical trial candidate for a new liver support system. Soon, Fitzmaurice became the first person in New England to be treated with a revolutionary artificial liver machine that kept him alive for two days while he waited for a liver transplant.

The ELAD (extracorporeal liver-assist device) is a machine designed to support a patient with acute liver failure 24 hours a day for up to 10 days while the patient waits for an organ to become available or while the liver regenerates. ELAD is manufactured by VitaGen Inc. and is being tested in a clinical trial at the MGH and five other U.S. hospitals.

Within hours of being placed on the machine, Fitzmaurice became more responsive and alert. Two days later an organ became available, and he underwent a successful liver transplantation. "It's remarkable. I thank God every day," said Fitzmaurice at an MGH press conference Sept. 26, 2002. "I feel like I have been given a new lease on life."

3 Sit back, relax, surf the net, give blood platelets

An innovative new tool in blood donation making blood platelet donation fun and easy was introduced this year. The E-Chair, provided to the MGH by Baxter Healthcare Corp., is a comfortable reclining leather chair with a connected laptop computer. The laptop gives donors the option of watching a DVD movie, playing computer games or listening to music. The chair also enables busy donors to set up a "virtual office" allowing them to send e-mails and use the Internet. Platelet donation is accomplished through the process of pheresis. Whole blood is drawn from a donor's arm, platelets are separated from the blood – which consists of red and white cells, platelets and plasma – and the remaining blood components then are returned to the donor through the other arm.

"Platelets are important in treating patients with leukemia and other cancers, as well as sickle cell anemia," says Kim Cronin of the MGH Blood Donor Center. "A single donor can provide enough platelets for one or two transfusions, but we are always in need of more donors. That's why it is so important to improve the appeal to people who either don't have the time to donate or who think the process is unpleasant."

Although other hospitals around the country also use the E-Chair, the MGH is the first hospital in Massachusetts to offer the chair to its donors.

1

2

3

2002 AT A GLANCE

- The Boston Redevelopment Authority approves MGH plans for new ambulatory care building.
- Toronto Blue Jays' first baseman Carlos Delgado visits the MGH to help establish a telemedicine link between the MGH and a hospital in Puerto Rico.
- Partners Parkinson's and Movement Disorders Treatment Center launched.
- OCEAN program at MGH partners with M. Patricia Cronin Foundation and the National Ovarian Cancer Coalition to launch first state-wide awareness campaign for national Ovarian Cancer Awareness Month.
- MGH and BWH researchers find that moderate alcohol consumption is linked to decreased hypertension in young women.
- MGH staff and Latino Professional Network organize the first Latino Networking Night at the MGH.
- MGH scientists find new antitumor qualities in the monoclonal antibody herceptin.
- Blum Patient and Family Learning Center celebrates its third anniversary.
- MGH study finds that a simple blood test may be able to predict risk of preeclampsia.
- Quarterback Doug Flutie participates in a basketball tournament to benefit the MGH LADDERS program and its struggle to help autistic children.
- Ben Lipson, an MGH patient, donates proceeds from his book to the Marjorie E. Lipson Memorial Fund at the MGH Stoeckle Center for Primary Care.
- Former Massachusetts Governor Michael Dukakis visits MGH research lab.
- MGHers gather to remember and commemorate Sept. 11 tragedy.
- AMMP recognizes members and scholarship recipients at annual luncheon.
- MGH researchers find that lymphatic vessels surrounding tumors are key to cancer spread.
- MGH research team finds that arthritis drug may reduce risk of cardiovascular death.

2002 Susan and Arthur Durante Awards

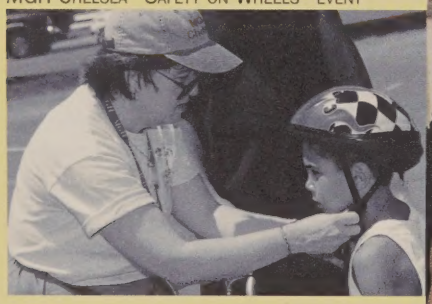
18,336 hours of volunteer service recognized

MGH Institute of Health Professions holds 22nd Commencement

Operations Support Staff Day

Take Our Children to Work Day

MGH Chelsea "Safety on Wheels" event



Patient and Family Reunion

Bone Marrow Transplant

Actress Julie Andrews supports MGH and MEEI research

MGH nurse with sons, both saved by the MGH

House staff orientation

Children and HealthCare Week

MGH Annual summer picnic

Office of Women's Careers holds Faculty Reception

Financials

The General Hospital Corporation

The General Hospital Corporation

Excerpts from audited financial statements (in thousands of dollars).
Years ending Sept. 30.

	2001	2002
Revenue		
Net patient service revenue	$928,432	$1,030,924
Other operating revenue:		
Direct research revenues	235,236	280,162
Indirect research revenues	90,368	100,648
Other	55,317	64,053
Total operating revenue	**1,309,353**	**1,475,787**
Expenses		
Operating expenses:		
Employee compensation and benefits	484,436	552,206
Supplies and other expenses	430,348	463,540
Direct research expenses	235,236	280,162
Depreciation	77,003	80,819
Interest	14,716	13,181
Provision for bad debts	23,892	22,734
Total operating expenses	**1,265,631**	**1,412,642**
Income (loss) from operations	43,722	63,145
Nonoperating gains (losses), net	15,770	(15,108)
Excess of revenues over expenses	**$59,492**	**$48,037**

Volunteers comfort with quilts

2002 at a Glance

- MGH Volunteer Department recognized by the American Hospital Association for its "Language Bridge" project to help caregivers communicate with non-English speaking patients.
- An MGH cancer patient donates $6,000 to benefit the pancreatic cancer research fund of Andrew L. Warshaw, MD, MGH surgeon-in-chief.
- Claflin Awards support career advancement for women faculty.
- Total of minority residents "matching" at the MGH increases by 73 percent.
- MGH celebrates Nurse Recognition Week.
- MGH Office for Women's Careers hosts fifth annual women faculty reception.
- A 13-year-old boy whose mother was an MGH patient raises more than $2,000 for MGH breast cancer research.
- Nursing Spectrum – a nurse-led communications company – honors MGHer Maryfran Hughes, RN, MSN, as New England Nurse of the Year.
- "Faces of MGH" murals go on display.
- MGH presents check to Mass Bay Transportation Authority to assist in modernization of Charles Street/MGH T stop.
- MGH Institute of Health Professions celebrates its 25th anniversary.
- Joseph A. Ciffolillo appointed chairman of the newly formed MGH President's Council.
- The seventh annual Partners in Excellence Awards recognize more than 1,800 MGHers.
- A professorship at Harvard Medical School is named in tribute to Samuel O. Thier, MD, CEO and president of Partners.
- MGH celebrates Ether Day 2002.
- MGH Chelsea HealthCare Center hosts a health and wellness event at the Williams Middle School.
- MGH participates in citywide disaster preparedness drill.

PACE TEAM HOLDS INTERACTIVE WORKSHOP

MGH SENIOR HEALTHWISE PROGRAM LAUNCHED

SPANISH FOR HEALTH CARE PROGRAM

COOKING DEMONSTRATION FOR SENIORS

MGH CHELSEA AT LATIN AMERICAN FESTIVAL

MASSACHUSETTS GENERAL PHYSICIANS ORGANIZATION, INC.

MASSACHUSETTS GENERAL PHYSICIANS ORGANIZATION, INC.

Excerpts from audited financial statements (in thousands of dollars).
Years ending Sept. 30.

	2001	2002
REVENUE		
Net patient service revenue	$221,409	$250,432
Other revenue:		
Teaching and administrative	11,732	12,230
Other	48,726	59,077
Total operating revenue	**$281,867**	**$321,739**
EXPENSES		
Employee compensation and benefits	213,274	237,545
Supplies and other expenses	33,357	36,726
Professional liability expense	5,374	6,130
Depreciation and amortization	2,863	3,647
Provision for bad debts	22,720	29,564
Interest	232	195
Total operating expenses	**277,820**	**313,807**
Income (loss) from operations	4,047	7,931
Nonoperating gains/(losses)	(725)	(2,605)
Excess of revenue over expenses	**$3,322**	**$5,326**
Other changes in net assets:		
Change in net unrealized gains on investment	150	1,396
Transfers from affiliated corporations	3,850	616
Increase in unrestricted net assets	**$7,322**	**$7,339**

The Massachusetts General Hospital: Facts and figures 2002

	2002
Available beds	875
Average occupancy rate	79.88%
Admissions	43,312
Average length of stay *(in days)*	5.86
Admissions to observe	4,566
Ambulatory visits	
MGPO visits (approx.)	657,087
Clinic visits (hospital and some group)	413,528
Health centers	
Charlestown	50,832
Chelsea	147,015
Revere	81,736
Back Bay	13,042
Total health center visits	**292,625**
Emergency visits	75,605
Total ambulatory and emergency visits	**1,438,845**
Surgical cases	
Inpatient	17,852
Ambulatory	14,798
Total surgical cases	**32,650**
Births	3,377
Staff	
Clinical staff	2,560
Residents	750
Clinical fellows	420
Research fellows	1,046
Nonclinical staff	855
Registered nurses	2,952
Other employees	7,720
Total employees	**15,553**
Research expenditures	$357,222,000

2002 at a glance

- Ringling Brothers Barnum and Bailey Circus clowns visit pediatric patients.
- MGH Diabetes Primary Care Improvement Program receives a Nesson Award for the hospital's multidisciplinary effort to improve type 2 diabetes care.
- MGH joins other hospitals and organizations in advertising campaign highlighting the shortage of blood donations in summer.
- A new version of the hand disinfectant Cal Stat is introduced by MGH Hand Hygiene Program.
- Family, friends and caregivers gather for the 11th annual Pediatric Memorial Service.
- The Thomas S. Durant, MD, golf tournament raises funds for the refugee medicine program.
- *U.S. News and World Report* ranks MGH third best hospital in the nation.
- MGH clinical researchers find bladder sparing procedure effective for treating invasive bladder cancer.
- MGH researchers find properties of a naturally occurring hormone could lead to a new treatment for diabetes.
- MGH research team finds time-release stimulant improves attention deficit treatment.
- Collaborative program between MassGeneral Hospital for Children and MGH Neurology offers help to children with epilepsy.
- Murals honoring the victims and the relief teams of Sept. 11 displayed at MGH.
- Participants in the MGH Making a Difference grant program recognized.
- MGH Charlestown HealthCare Center introduces a new van to help patients get to their appointments.
- Lung donors are honored by family, friends, staff and transplant recipients.
- The MGH teams up with the ALS Therapy Alliance, CVS/pharmacy and Boston Red Sox player Nomar Garciaparra's foundation, the Nomar 5 Fund, to raise research funds for Lou Gehrig's Disease.
- MGH Office for Women's Careers kicks off lunch-time learning series for women faculty.

CLUBS AT CHARLES RIVER PARK OFFER SUMMER FUN

FORMER GOVERNOR VISITS RESEARCH LAB

MGHERS HOLD SEPT 11 MEMORIAL

AMMP SCHOLARSHIP RECIPIENTS

MGHERS PARTICIPATE IN AMERICAN HEART ASSOCIATION WALKATHON

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2002 AT A GLANCE

- MGH dedicates its new Avon Foundation Comprehensive Breast Evaluation Center.
- MGH researchers find enzyme associated with Alzheimer's disease elevated in key brain areas.
- MassGeneral Hospital for Children and Jordan's Furniture host car seat safety checks.
- MGH Revere HealthCare Center opens new school-based health center at Revere High School.
- Former MGHer Janet McArthur, MD, who is featured in the book, *History of Women in Medicine*, visits the hospital.
- The Excellence in Action award recognizes MGH employees for exceptional commitment to patient care.
- Harvard Medical School professorship named for Nicholas Zervas, MD.
- The Friends of the MGH Cancer Center raise money through their 10th annual FAO Schwartz Holiday Shopping Benefit.
- Ronald L. Skates succeeds Nicholas W. Thorndike as chairman of the MGH Fund.
- Mass General Hospital for Children (MGHC) patients participate in Filene's Tree Lighting Ceremony in Downtown Crossing, and MGHC is named beneficiary of the store's Holiday Book Promotion.
- Kristian Olson, MD, named the first Thomas S. Durant, MD, Fellow in Refugee Medicine.
- Researchers find that immune system control of HIV may not protect against second infection.
- James J. Mongan, MD, bids farewell to MGH at his last leadership meeting.
- James J. Mongan, MD; Peter L. Slavin, MD; Samuel O. Thier, MD; and David F. Torchiana, MD, step into new leadership roles.

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MAKING A GIFT TO THE Massachusetts General Hospital is very important and rewarding. As a donor, you help guarantee Mass General's world-renowned leadership in patient care and treatment. Your contributions provide the means for cutting-edge research and teaching, the most advanced approaches to diagnosis and treatment, as well as for the construction of new, state-of-the-art facilities.

The MGH Development Office serves as a resource to help you support the hospital's mission of high-quality patient care, research and education. Development staff are readily available to present donors with gift options beneficial to themselves and the hospital, to assist donors in achieving their philanthropic, estate planning and tax planning objectives, as well as to identify donor recognition opportunities.

Historically, the generosity of donors, friends and patients has continually provided much-needed support for Mass General's vital undertakings. Today, philanthropy continues to provide the foundation for future endeavors.

Donors may wish to direct their gift to a physician, program or research initiative at the hospital that holds special meaning to them or may choose to make an unresticted MGH Fund gift that can be used where the need is most critical.

Your support is much needed and appreciated. So please, join the MGH in its ongoing work to provide leadership and excellence in the treatment and care of each and every patient who needs us.

For More Information

For more giving opportunities or information, contact the MGH Development Office:

Massachusetts General Hospital
Development Office
100 Charles River Plaza, Suite 600
Boston, MA 02114

Phone: (617) 726-2200
Toll free: (877) 644-7733

E-mail: *mghdevelopment@partners.org*
Web site: *www.mghgifts.org*

Seventh annual Partners in Excellence Awards

MGH Chelsea health and wellness event

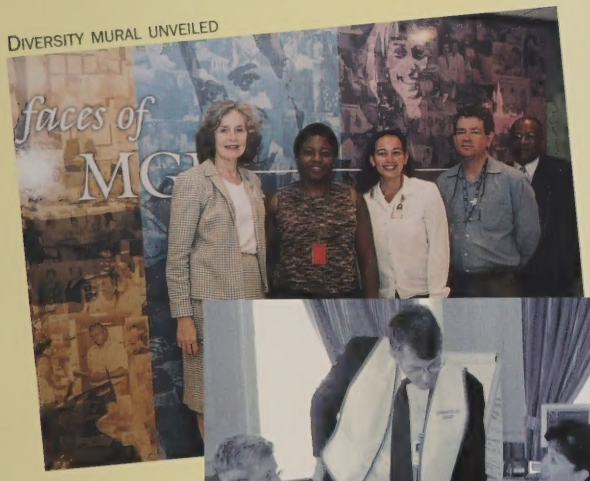
MGH holiday party

Thier Chair announced

Flu shots for MGH employees

Ether Day 2002

Diversity mural unveiled



MGH in citywide disaster drill

Timilty Science Fair at MGH

The circus comes to MGH

Nesson Award

Leadership transitions at MGH, MGPO and Partners

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